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ABSTRACT

Intended for personnel with no prior experience or training in the provision of audiovisual materials, this continuing education course booklet presents an introduction to the acquisition and administration of 16 mm films, 35 mm slides, 3/4 inch videotape cassettes, 35 mm filmstrips, and audiotape cassettes in hospital libraries serving hospital staff and/or patients. A description of the development of a learning resources center in a hospital library includes information on planning and budget considerations and a list of advantages and disadvantages of 10 audiovisual formats. This is followed by a review of published and other sources of information on health science audiovisual materials and audiovisual equipment. A list of organizations offering information on audiovisuals and a discussion of interlibrary lending are also provided. Further sections cover the evaluation, acquisition, cataloging, packaging, labeling, and shelving of audiovisual materials, and the selection and maintenance of audiovisual equipment. An extensive list of sources that produce health science audiovisual materials is given which includes their addresses and telephone numbers. Also provided are a suggested course timetable, a 50-item glossary of audiovisual terminology, and a 79-item bibliography. (ESR)

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CE 16

Management of Media in Hospital Libraries

IR050457

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The MLA Continuing Education Committee wishes to express its thanks to Dorothy A. Spencer, Pamela L. Schiffer, and Pecky B. Cronan, of the Medical College of Georgia Library, who developed this syllabus.

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First Revision

1977

CE 16, Revised

Management of Media in Hospital Libraries

Target Audience: Personnel from hospital libraries with no prior experience or training in audiovisuals in the health science environment.

Note: Persons with prior training, or working in an established program, should choose the CE 30-31 sequence.

Scope of Course: CE 16, Revised is designed for hospital library personnel. After an initial discussion of advantages and disadvantages of a variety of audiovisual formats, it will only cover the following formats of audiovisual hardware and software: 16 mm. films, 35 mm. slides, 3/4 in. videotape cassettes, 35 mm. filmstrips and audiotape cassettes.

Objectives: Upon completion of this learning experience, the student should be able to:

1. Identify the steps necessary in establishing a learning resources center in a hospital library setting.

2. List advantages and disadvantages of the five formats of audiovisual materials commonly found in a hospital library setting.

3. Write a program outline and sample budget for a learning resources center.

4. Identify and explain the use of basic reference tools for health science audiovisual materials.

5. Describe the elements which must be considered in developing an acquisitions policy for a health science learning resources center.

6. Catalog a piece of audiovisual software to the Anglo-American Cataloging Rules.

7. Package and label a piece of audiovisual software.

8. List advantages and disadvantages of each format with regard to shelving.

9. Identify sources of health sciences audiovisual materials.

CE 16, Revised

MANAGEMENT OF MEDIA IN HOSPITAL LIBRARIES

Suggested Class Schedule

9:00 - 9:15	Introduction and Welcome
9:15 - 10:30	Introduction to Hardware and Software (Overview) Advantages and Disadvantages of each format Reference Acquisitions
10:30 - 10:45	Break
10:45 - 11:00	Interlibrary Loan
11:00 - 12:30	Introduction to Cataloging Cataloging Practice
12:30 - 1:30	Lunch
1:30 - 2:00	Questions
2:00 - 3:00	Storage (mini lecture) Packaging Shelving
3:00 - 3:15	Break
3:15 - 4:30	Hands on Experience
4:30 - 5:00	Evaluation and Questions

(Note: This syllabus could be adapted for regional use by expanding the schedule 1 hour and starting at 8:00 A.M. This additional time would allow for regional materials and services to be discussed under the general heading "Introduction and Overview of Hardware and Software - - - Reference and Acquisitions.")

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I. DEVELOPING A LEARNING RESOURCE CENTER

DEVELOPING A LEARNING RESOURCES CENTER

Personnel Identification

In developing a learning resources center for a hospital based program, it is essential that as many of the following groups be consulted and utilized in developing the initial data base from which specific programs will be written. Participants in such a "task force" should include:

Subject matter experts:

This may be a representative from each clinical area or selected personnel with broad knowledge of the clinical programs of the hospital. The subject expert's responsibility will be to assure adequate and accurate subject coverage in all education programs developed and in all audiovisual software and print materials selected.

Educator(s):

The educator may be a staff member already working in the area of in-service training, staff development and/or patient education. If no educational specialist exists on the staff, an outside educational consultant should be consulted to ensure that all programs developed are complementary with existing programs, in line with the general educational goals of the institution and reflect current standards of methodology.

The educator's responsibility will be to assure that any and all curriculum projects within the institution are adequately designed from an educational perspective, and that any media and related materials utilized be chosen because they meet the needs of the instruction being undertaken.

Technical expert(s):

This individual might be the person responsible for selection and maintenance of existing audiovisual equipment in the institution. If no such individual is available on the staff, an outside consultant may be identified through the local board of education, a community college or university, or if a "neutral" person is not available another option might be a communal service technician.

The role of this individual should be to present the latest information available on audiovisual hardware, accessories, maintenance and support, purchase costs, supplies, etc.

Intended users:

Some mechanism for "consumer" in-put should be provided. This could be done with students in a teaching hospital, or with staff or patient representatives in other situations. The role of the user representative is to assure that educational programs developed will be in meeting with the needs, limitations and preferences of the users. If the user is "turned off" by the experience learning will not take place.

Administrator:

A representative from the hospital's administration should be included in all educational program development activities. This will assure that such activities meet the overall goals of the institution. In addition, the administration is usually most knowledgeable in such areas as laws regulating physical plants (fire, occupancy, equipment which may be utilized, OSHA, etc.), ability to staff developing programs and budget to fulfill program requirements.

Librarian(s):

Since the end product of this planning activity is to deliver a service program to meet the educational and informational needs of the institution, the person responsible for delivering this service, namely the librarian, should be in charge of coordinating and implementing these program development activities.

Responsibilities of the librarian would include coordinating the completion of all preliminary survey activities, writing program outlines, developing service policies, coordinating the selection, evaluation and acquisition of hardware, software and print materials to meet the educational objectives of the program and to deliver an on-going service of information, utilization and support of all educational materials to all user groups within the institution. In addition, the librarian would be charged with periodic review and update or programs policies and procedures to assure that these programs continue to reflect educational as well as institutional goals and objectives.

Two sources which may be consulted for ideas on formation and utilization of such an interdisciplinary task force are the Handbook of Medical Library Practice[1] and an excellent article by Goodchild and Trygstad on "The Role of an Educational Media Advisory Committee in the Health Sciences Library."[2]

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[1]Annan, Gertrude and Felter, Jacqueline W. Handbook of Medical Library Practice, 3rd ed. Chicago: Medical Library Association, 1970.

[2]Goodchild, Eleanor Y. and Trygstad, Carl W. "The Role of an Educational Media Advisory Committee in the Health Sciences Library." Bulletin of the Medical Library Association, 63(2) (April, 1975), pp. 223-5.

SURVEY OF EXISTING RESOURCES

Before committing resources to a potentially costly and time-consuming program, preliminary assessment of existing resources should be made.

This assessment can encompass several types of surveys to help profile the environment in which a developing program finds itself.

The most frequently used surveys are:

Resources Survey: This would be an inventory of all or as much of the existing audiovisual hardware and software that can be identified with an institution or program.

User Survey: This survey would explore the interest and attitude of staff, student, patient and other potential user groups to assess interest in use of audiovisuals, preferences with regard to formats, successes and frustrations in using audiovisuals, areas of subject interest and indications of future interest in audiovisuals, etc. Administration, biocommunications and library personnel should be included among the personnel surveyed.

Curriculum Survey: Mediated materials are usually strongly curriculum oriented. Review what is being taught in a given educational situation. Are there educational objectives? How is subject matter being presented, and aremedia being used in instruction? Are any/all materials which are used achieving the educational objectives of the courses offered? If media are<u>not</u> being used, does this appear to be a possible solution to improving the curriculum? What advantages do instructors perceive media to have over current modes of instruction?

"State of the Art": This may be reviewed through literature searches, conversations with other biomedical communication/library personnel, local educators, audiovisual service personnel, etc. What formats of audiovisual materials are performing well in various educational situations? Which formats are proving most cost effective? What do specific hardware and software cost? What technological changes are pending which would leave existing systems obsolete? What formats of software offer the greatest potential resource of materials for given disciplines and subject areas?

Upon completion of this survey activity, the person(s) responsible for initial program goals and objectives will have an adequate overview of the audiovisual field as well as an adequate "pulse" on how audiovisuals might be applied to meet the needs of a specific institution or program.

Your survey should have guided you in answering the following questions.

1. Is there interest in using audiovisuals in this institution/program?
2. Are there existing resources which could be used as a foundation upon which to build a program? Based upon the "State of the Art" are these materials technologically viable?
3. Are these resources being utilized currently? Do they meet the objectives of the educational programs in which they are used?
4. Are there alternative materials available? Are these materials in other formats, or for audiences not covered by existing materials?
5. Based upon existing and indicated demand, how large and how quickly should this program grow?

SAMPLE USER SURVEY[3]

Name_____ Extension_____

Department_____ Date_____

If your department does not have audiovisuals please answer question four.

		x	y
1.	How often are audiovisual programs used?		
	a. Number of courses supported by audiovisuals	a.	
	b. Hours per week use of all audiovisuals	b.	
	c. Number of students using them	c.	
	d. Number of courses provided in one year	d.	
	e. Average duration of courses	e.	
	f. Total students for all courses in one year	f.	
2.	What types of audiovisuals are you using (x) Which types do you find most satisfactory (y)		
	a. Audiotapes	a.	
	b. Slides	b.	
	c. Filmstrips	c.	
	d. Photographs	d.	
	e. X-rays	e.	
	f. Transparencies	f.	
	g. 16 mm. films	g.	
	h. 8 mm. films	h.	
	i. Videocassettes	i.	
	j. Models	j.	
	k. Specimens	k.	
3.	How are audiovisuals being used (x) For which have they proven most satisfactory (y)		
	a. Lecture support	a.	
	b. Lecture reinforcement	b.	
	c. Substitute for lecture	c.	
	d. Independent study	d.	
	e. Small group study	e.	
4.	What do you see as the problems with audiovisuals		
	a. Lack of good programs	a.	
	b. Difficult to obtain	b.	
	c. Difficult to use	c.	
	d. Requires too much time to integrate with print materials or lecture	d.	
	e. Poor equipment	e.	
	f. Material must be scheduled too far in advance	f.	
	g. No information on what is available	g.	
	h. Too expensive	h.	
	i. I would be interested in using audiovisuals if these problems were overcome	i.	

[3]Bogan, Betty. Basic Media Management-Hardware and Physical Facilities. Chicago: Medical Library Association, 1976. p. 19.

PREPARING TO WRITE A PROGRAM POLICY STATEMENT

Selecting the scope of the program

Based upon the result of your survey activities you should now be able to judge the initial scope of the program to be undertaken.

The following represents four levels of program activity from simple to complex and indirect types of activities which might be added from one level to the next as you expand the scope of your program.[4]

Reference only

Librarian provides information only.

Patron has access to catalogs

Patron orders his/her own films.

Limited Collection

Limited number of items available in-house

Patron has access to catalogs in addition to in-house collection.

Librarian acts as broker-ordering films as needed.

Permanent Collection

Core library of audiovisuals in each major area of the health sciences appropriate to the particular institution/program.

Librarian acts as broker-ordering supplemental materials as needed.

Catalog collection maintained for reference.

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[4]Johnson, Margaret and Brooks, Margaret L. Management of Media in Libraries. Chicago: Medical Library Association, 1971. p. 4.

Full Service

Core library of audiovisuals in each major area of the health sciences appropriate to the institution/program.

Librarian continues to act as broker for film orders.

Catalog collection maintained for reference.

In-house production of materials needed to support educational objectives of the institution/program.

Define the initial population or audience to be served

With a realistic appraisal of the size of media resources available and an accurate projection of the program goals and objectives to be met, it should be possible to ascertain the following:

1. (a) Which group or groups will make up the primary user group for the learning resources center.
   (b) The size of this group(s).
2. (a) Which group or groups will occasionally utilize the learning resources center.
   (b) The size of this group(s).
3. (a) What demands, if any, will be made upon the learning resources center?

Based upon these projections and the resources available to meet the expected demands, priorities for use by these respective groups can be established. Limitations on the learning resource center by groups outside the institution can also be set.

Selecting basic activities to be conducted within the scope of the type of program you have selected

Examples of activities could include:

1. Collection development (selection, acquisition, cataloging, weeding the collection, etc.)
2. In-house utilization of media
3. Circulation within the institution, community, or inter-library loan
4. Reference services
   a. Intra-institutional resources available
   b. Resources available from outside the institution including: commercially produced, privately sponsored, governmental or materials from education agencies.
5. Production of audiovisual materials to meet the needs of specific educational objectives

Choosing media formats

General Considerations: The following are selection criteria which should be applied to all formats of media in assessing their potential place in a media program.

Effectiveness of Communication

Purposes and Uses

Convenience of Use

Durability

Price Range

Facilities Required for Use

Advantages and disadvantages of specific formats

35 mm. (2x2 in.) Slides

Advantages

Many titles from multiple sources available in the health sciences.

Sound can be added easily via manual or programmed audiotape.

Moderately priced.

Can be easily up-dated or duplicated.

Excellent projection equipment is easily interchanged and readily available.

Good for independent study, small groups and large group use.

Disadvantages

Individual slides easily lost.

Cataloging/indexing single slides is very complex.

Mass duplication can be expensive.

No motion capabilities.

35 mm. Filmstrips

Advantages

Abundant sources of titles for the health sciences.

Suited for individual, small group or large group instruction.

"Strip" keeps the integrity of a set more readily than individual 35 mm. slides.

Can come in silent and sound versions.

Disadvantages

Not easily updated or adaptable to specific curriculum uses as are 35 mm. slides.

Easily damaged with all the physical problems of 16 mm. film stock.

Sound tracks can be recorded and pulsed at different frequencies to tie software to a single hardware brand or model.

Varying quality of content in the health sciences.

No motion capabilities.

3x4 in. Lantern Slides

Advantages

Can be made easily by laboratory personnel for "home grown" purposes.

Suitable for small group, or large group viewing.

Disadvantages

No commerical sources for purchase.

Fragile.

Used only in the health sciences or for microscopic studies.

Most content could be reproduced for 35 mm. (2x2 in.) slides.

Equipment not being upgraded and improved as are other formats of media.

No motion capability.

Overhead Transparencies

Advantages

Ideal for classroom teaching and enhancement of lecture.

Software easy, inexpensive to produce.

Disadvantages

Not suited for individual study.

Equipment not readily movable.

Software geared to classroom teaching not independent study.

Limited sources of commercial software for the health sciences.

No motion capability.

Super 8 mm. Films

Advantages

Useful in independent, or small group study.

Equipment can be portable.

Mass duplication of software can be less expensive than other formats.

Color quality control can be superior to television.

Can show motion when needed.

Disadvantages

Non-standardize equipment between manufacturers.

Limited flexibility in use of software (e.g. no freeze or reverse in Fairchild cartridge).

Limited source of commercial software.

Repair and maintenance of hard and software difficult and expensive to maintain.

Not suited to large audiences.

16 mm. Films

Advantages

Large resource of titles available for the health sciences.

Only truly universal format of hardware.

Hardware is portable.

Disadvantages

Software very fragile.

Hardware comes in magnetic and optical sound. Software must be appropriate for sound mechanism of a particular projector or the sound track is lost.

Cost to purchase and maintain software/hardware can be very high.

Inefficient way to present still photography.

Not easily used for independent study.

3/4 in. Videotape Cassettes

Advantages

Easy to use.

More cost/efficient than 16 mm.

Many sources of software for the health sciences.

Cassette may be erased and reused.

Disadvantages

Cassettes cannot be edited without special equipment.

Color not as "true" as in 16 mm.

Hardware more expensive than 16 mm.

Sound Recordings - Reel to Reel Audiotapes

Advantages

Suitable for individual, small group and, occasionally, large group activities.

Can record as well as playback prerecorded material.

Reel to reel tape can be used for production and editing purposes.

Easily duplicated.

Disadvantages

Reel to reel equipment expensive and bulkier than cassette models.

Reel to reel threading not as convenient as cassettes.

Sound Recordings - Audiotape Cassette

Advantages

- Easy to use.
- Player and player recorder equipment readily available and inexpensive.
- Cassettes are standardized and interchangeable on brands of various equipment.
- Easily duplicated.

Disadvantages

- Not easily edited.
- Not easily spliced if tape is broken.
- Broken case may not easily be repaired.

Sound Recordings - Discs

Advantages

Abundant hardware resources.

Fidelity for master recordings is excellent.

Easy to use (equipment is very familiar).

Disadvantages

Easily damaged.

Less portable than cassettes.

Can not be edited.

Discs are not reusable as in tape.

Standardizing media

After reviewing the advantages and disadvantages of the various formats of audiovisual materials, decisions on selecting formats to be utilized in a particular program should be easier to make.

Limiting the number of formats chosen for a media program can result in simplified patron operations, streamlined management systems, reduced costs and enhanced collection development. Brantz has outlined one such "Experiment in Standardization" in a recent article.[5]

In reviewing the formats most commonly found in the hospital environment the following appeared most frequently:

16 mm. films

35 mm. (2x2 in.) slides

Audiotape cassettes

3/4 in. videotape cassettes

Sound filmstrips

Throughout the remainder of this syllabus, we will concentrate on these five formats and explore the many aspects of media management with particular emphasis on the positive aspects and unique problems.

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[5]Brantz, Malcolm. "Experiment in Standardization." Wilson Library Bulletin. Vol. 49, 1975. pp. 573-6.

WRITING THE PROGRAM OUTLINE

Having chosen the formats of media to be utilized within the proposed program, the size of the population to be served, and the expected growth rate of services, program planners should be able to make the following decisions for implementing the actual program.

Facilities: Decisions on the minimum square footage required for a learning resources program are essential. Include seating, equipment storage, software storage, etc. You cannot compromise on the amount of space to be utilized without modifying the goals, objectives, scope and policies of the program. SPACE CANNOT BE COMPROMISED!

Staff: Decisions on minimum staff required to operate the learning resource center will vary according to services to be offered and hours of operation. If staff is restricted, services should be cut. The center should never be operated without a staff member in attendance. In addition to minimum staff requirements, decisions on the quality of personnel needed must be made. The more numerous and sophisticated the services, the more qualified the staff that will be required for adequate operation. If sufficiently trained personnel are not available, the scope and complexity of the program should be limited to match the capabilities of personnel employed.

Hardware Purchases: Although facilities and staffing are absolute, purchasing of hardware and software may be set in terms of priorities to meet the goals of the developing program. Listing all audiovisual hardware as well as storage equipment, seating, etc. and deciding what is

absolutely essential to "open the doors" for operation is the first step. Next, list additional equipment which, if added subsequently, will expand the operation in a pattern consistent with the goals and objectives of the program. Finally, list all the equipment which, if available, would provide first rate service. These priorities will aid you in later budget decisions.

BUDGET CONSIDERATIONS FOR A LEARNING RESOURCES CENTER

Budgeting for a learning resources program parallels budgeting activities for any service organization. There are, however, some unique considerations for which provision must be made. The most critical of these is in the area of support services and supplies to maintain hardware and software collections. A model budget might include provision for the following:

Personnel: Provision must be made for adequate staffing during all hours of learning resource center operations. Divisions within the personnel section of a budget should identify professional, para-professional, clerical and technical personnel. Note should also be made if they are full-time or part-time employees.

Software: As with print journals, subscriptions to non-print subscriptions must receive first priority in a new budget to assure continuous holding of a given title(s). Money for replacement of lost and damaged materials must also be identified. New materials should be budgeted with priority of need in mind. Provision should also be made for support supplies and materials. These include such items as slide trays, labels, film cleaning supplies, special circulation supplies, etc. Supplies should be an identified budget item separate from the general clerical supply budget.

Hardware: Replacement of used or obsolete equipment should be considered first in planning a hardware budget, with additional new equipment coming next in the decision process. Provision for service of

equipment must also be made. This may include labor and/or supplies (bulbs, lamps, lenses, etc.) for in-house maintenance. If in-house maintenance is not realistic due to the size and budget of the program, contract service should be arranged through a local dealer.

SAMPLE BUDGET OUTLINE

Personnel:

Catagory	Full Time Equivalent	Cost
Professional	1 fte	
Library Assistant	2 fte	
Clerks	4 @ 1/4 fte	
Audiovisual Technician	1 @ 1/2 fte	

Software:

Item	Quantity	Cost
Subscription Continuations		
Replacement Materials		
New Materials		
Audiovisual Support Supplies		

Hardware:

Item	Quantity	Cost
Replacement Equipment		
New Equipment		
Maintenance		
a) in-house labor, supplies or		
b) service contracts		

CONSIDERATIONS FOR EXPANSION OR MODIFICATION OF LEARNING RESOURCE CENTER SERVICES

1. Curriculum changes
2. User demand
3. Availability of software
4. Changes in media technology
5. Development in medical technology
6. Changes in institutional goals and needs
7. Additional program capacity due to
   - expanded facilities
   - enlarged staff
   - expanded hours of operation
   - expanded media resources
   - others
8. Funding for all of the above

Note: The program policy statement should be reviewed annually. If the environment in which the program operates has changed, then the program itself should be modified to reflect these changes. Any such changes must be expressed in a written program policy statement.

Sources of reference information

Reference service for health science audiovisual material is not as easily accomplished as it is for print materials due to lack of adequate indexing and abstracting services and the slow evolution of such tools in this emerging field. The following reference sources will prove helpful in answering questions pertaining to health science audiovisual materials.

Sources of Hardware Information

Audiovisual Equipment Directory. National Audiovisual Association (NAVA), Fairfax, Virginia. Published yearly, this directory contains specifications on a variety of audiovisual equipment, carrels, screens, stands and carts. It lists dealers, manufacturers and trade names.

Educational Media Yearbook. R. R. Bowker Co., New York. Published yearly, it contains review articles on the state of the art with bibliographies as well as reference and directory information on organizations, granting agencies, serials, and print/audiovisual resources.

Educational Product Report. Educational Products Information Exchange, New York. It contains performance reports on various audiovisual hardware.

Local Dealers. These sales/service representatives are usually willing to demonstrate equipment and accessories on location in your institution. Reputable dealers will offer information on the performance records of specific brand names and models, will guarantee equipment and service what they sell.

Local AV Technicians. Identification of local technicians will provide a valuable information network useful in answering a variety of questions regarding audiovisual hardware.

Sources of Software Information

There is no "Books in Print" for health science audiovisual materials. As a result, media librarians must develop catalog collections of software available for sale, rent or loan. Major sources of catalogs will come primarily from the following:

- Professional Associations
- Health Agencies
- Government Agencies
- Colleges and Universities
- Pharmaceutical Companies
- Publishers
- Special Producers of Health Science Audiovisuals

The on-going development and maintenance of catalog collections is essential if reference services are to be kept timely and accurate.

"Coping with Catalogs"

"How to Grow your Own" is a useful article on how to acquire and manage a developing media collection.[1] Biomedical Communications, a trade journal, offers other helpful features such as "Software Library,"

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[1]Parlapiano, Karen. "How to Grow Your Own (Software Listing)." Biomedical Communications 4(3) (May, 1976), pp. 8-.

an index to key health science audiovisual catalogs compiled by Bruce Ardis and Margery Reed.[2] In addition to the "Software Library" feature, Biomedical Communications publishes annual software lists which are indexed for easy reference. These lists include: Buyer's Guide of AV Hardware, Equipment and Accessories (November issue), Pharmaceutical Programs Directory (March issue) and Medical Media Directory (May issue).

In large catalog collections it is easiest to file the catalogs alphabetically by the name of the producer/distributor. In small collections it may be easier to file selectively by subject. There is no best way to deal with the problem of subject cross-referencing. Each catalog should be carefully reviewed by the audiovisual librarian as it is received. To date, it still takes thoughtful, hand searching of catalogs by subject and title to yield software information. Brantz suggests the following process for handling catalogs:

Guidelines for Use of Catalogs

1. Always look at the various sections of the software catalog. Be aware of:
   a. Title indexes
   b. Bibliographic information provided
   c. Abstracts of programs (if given)
   d. Arrangement of main entries
2. Check to see if the catalog includes:
   a. Borrowing only (e.g. National Medical Audiovisual Center)

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[2]Ardis, Bruce and Reed, Margery. "Software Library." Biomedical Communications, 3(6) (November, 1975) p. 10-. Continued periodically in later issues.

b. Sales only (some software from the General Services Administration Federal Government)

c. Membership requirements (Network for Continuing Medical Education)

d. Loans and purchases (Davis and Geck)

3. In renting audiovisuals, check other distributors' catalogs. Prices vary as much as 100 percent between renting an audiovisual from the producer and borrowing it from a university. University prices also vary as much as 100 percent in their rental charges for the same title.
4. Attempt to get a feel for the subject areas in which the particular producer specializes.
5. If only one order form is provided, make a photocopy before it is used. This will save time in sending for extra order forms.
6. When a catalog is received, place the date on its cover. This will help eventually in weeding the collection.[3]

For use in developing such a catalog collection, there is an extensive producer/distributor listing beginning on page 114.

The future, however, holds promise of improved bibliographic tools and services which will help librarians to produce more comprehensive, accurate searches in much less time.

New and Developing Tools

AVLINE. This computerized peer reviewed data base of health science education programs is available through the MEDLINE Network from the National Library of Medicine. Although currently quite small, when fully

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[3]Brantz, Malcolm. Basic Media Management-Software. Chicago: Medical Library Association, 1976. pp. 15-16.

developed, AVLINE promises to offer approximately 10,000 peer reviewed programs found to be either recommended or highly recommended. AVLINE will not focus on in-service, continuing or patient education in its initial development. It will, however, concentrate on basic training for professionals from all areas of the allied health sciences.

Health Sciences Video Directory. New York: Shelter Books, 1976. $27.50. This publication due for publication December, 1976, promises to index 4400 titles of video programming in all formats for the health sciences. The publisher claims that all aspects of the health sciences will be covered including patient education and that each entry will be cross-referenced by up to three MeSH headings.

Index Medicus for Audiotape Journals. Though no working title has been assigned to this publication, the National Library of Medicine is currently employed in the development of a quarterly index for audiotape journals in the health sciences which will parallel the Index Medicus for print materials.

OCLC. The Ohio Colleges Library Council's computerized services for libraries also hold potential for health science audiovisual librarianship. Currently utilized primarily for book cataloging, OCLC is developing audiovisual cataloging, serials control, inter-library loan services and other automated, cooperative services. It is conceivable that in the future, groups of hospitals, operating as consortia, will be allowed to share an OCLC terminal for a variety of technical and reference applications. Currently, however, the system is limited in its audiovisual applications and is expensive for groups operating on limited budgets.

Organization offering audiovisual information

American Association of School Librarians, Division of
American Library Association (ALA)
50 E. Huron Street
Chicago, Illinois 60611

School library programs and hospital programs have many common management problems. Therefore publications from the AASL division of ALA can be useful in such areas as evaluation, interpretation of technical quality and utilization of media.

Association of Educational Communications and Technology (AECT)
1201 16th Street, N.W.
Washington, D.C. 20036

This organization has many divisions concerned with learning and educational technology. There are annual meetings and a varied publications program. In addition, there are local chapters which can provide excellent local contacts for information, service and continuing education.

Educational Products Information Exchange Institute (EPIE)
475 Riverside Drive
New York, New York 10027

This non-profit, consumer supported association is concerned with the assessment of educational software and hardware. In depth reports are prepared regularly for EPIE members. In addition, a newsletter, EPIEGRAM, is also available.

Health Education Media Association
P.O. Drawer 54189
Atlanta, Georgia 30308

This organization meets annually. Its stated purpose is to "promote design production, use and evaluation of audiovisual materials in programs for health education."

Health Sciences Communications Association (HeSCA)
P.O. Box 79
Millbrae, California 94030

This organization meets annually. Publications include a newsletter, "FEEDBACK," and the Journal of Biocommunication (with the Association of Medical Illustrators). There is a Biomedical Libraries special interest group. Its chief concern is "application of various communication modes to meet educational and related needs in the health sciences."

Medical Library Association (MLA)
919 North Michigan Avenue
Chicago, Illinois 60611

MLA is the primary professional organization for biomedical librarians in the U.S. and Canada. This organization has a special interest group, the Health Sciences Audiovisual Group, for persons interested in non-print materials. In addition, MLA's journal, the Bulletin of the Medical Library Association frequently contains articles dealing with media in health sciences libraries. The Association's newsletter, MLA News, contains a monthly media column entitled "Media Notes." MLA offers continuing education for health science librarians in areas related to audiovisual librarianship.

Government agencies offering audiovisual information

National Medical Audiovisual Center (NMAC)
1600 Clifton Road, N.E.
Atlanta, Georgia 30333

This agency, under the National Library of Medicine, plans and administers programs to improve the quality and use of biomedical audiovisual hardware and software.

National Audiovisual Center (GSA)
Washington, D.C. 20409
(301) 763-7420

The National Audiovisual Center serves as a clearing house for all media produced and utilized under the auspices of the federal government. A catalog listing productions sponsored by all governmental agencies which are available for loan, rental and/or sale is available by contacting the Information Branch, National Audiovisual Center.

Serials useful in audiovisual programs in the health science

"AAMC Newsletter," Association of American Medical Colleges, Washington, D.C. This newsletter offers some information on educational trends and news of institutions utilizing audiovisual programs.

American Journal of Nursing, American Journal of Nursing Company, New York. Periodically features articles on audiovisuals, particularly as applied to nursing education.

Audio-Visual Communications, United Business Publications, New York. This contains general case studies, suggestions for use, and product information.

Audiovisual Instruction, Association for Educational Communications and Technology (AECT), Washington, D.C. This contains research studies, book reviews, trends and hardware information.

Biomedical Communications, United Business Publications, New York. This contains hardware and software information, articles on methodology and other general information in the area of biomedical communications.

Educational and Industrial Television, C.S. Tepfer Publishing Company, Ridgefield, Connecticut. This contains articles dealing with developments in television technology.

Journal of Biocommunication, Association of Medical Illustrators and the Health Sciences Communications Association, Millbrae, California. This contains scholarly articles on topics of interest to biomedical communications personnel.

Library Technology Reports, American Library Association, Chicago. This contains extensive evaluations of independently tested library equipment and supplies. Evaluations of audiovisual hardware are updated periodically.

MLA News, Medical Library Association, Chicago. This newsletter features "Media Notes," a current awareness and reader response column for audiovisual personnel.

Previews, R. R. Bowker, New York. It contains software information and equipment advertisements as well as descriptions of new equipment on the market.

The reference interview

Reference interviews for questions pertaining to audiovisual materials are basically like reference interviews conducted for traditional materials collections. Since searching many catalogs for audiovisual titles can be difficult, the reference interview becomes especially important. It is frustrating to search and find a program in the subject desired, only to be told that it had been reviewed and eliminated earlier by the requestor.

Some points to remember in conducting the reference interview are:

1. The patron should be as specific as possible about the desired subject area.

2. The format, audience level, date wanted, etc. should be specified.
3. Always ask the patron what they know about possible sources. You will find some to be very knowledgeable and able to save you time.

If the patron wants a particular film:

1. Be sure you identify the correct producer. Many times titles provided by patrons are incorrect.
2. Ask the patron how he got the information (first hand, second hand, etc.).
3. If no title or producer can be given, the patron should know there is little chance of finding that particular film quickly.[4]

Interlibrary loan

The National Interlibrary Loan Code was adapted by the American Library Association in 1968.

Purpose

The purpose of interlibrary loans is to make available, for research, materials not owned by a given library, in the belief that the furtherance of knowledge is in the general interest. Interlibrary loan service supplements a library's resources by making available for use of an individual, materials from other libraries not owned by the borrowing library.

Scope

Any type of library materials needed for the purpose of research may be requested on loan or in photocopy from another library. The lending library has the privilege of deciding in each case whether a particular item should or should not be provided, and

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[4]Brantz, Ibid., p. 11.

whether the original or a copy should be sent.[5]

If group of participating libraries decides to support one another through sharing of audiovisual materials, it is important that this group establish procedural guidelines for interlibrary loan of audiovisuals. Such guidelines might contain:

Who May Borrow - a definition of what individuals or institutions qualify to participate in this specific interlibrary loan arrangement.

What May Be Borrowed - specificiations of what quantities, subjects and formats of materials may be borrowed.

How Items May Be Borrowed - specific procedures for borrowing and loaning materials including: required forms, circulation periods and procedures, necessary insurance, and specific transportation instructions.

It is suggested that all interlibrary loans be conducted utilizing the American Library Association's Interlibrary Loan form (See Figure 1). This form, unfortunately, was not designed for use with audiovisual materials. Some groups may choose to modify the form to better meet the needs of audiovisuals and include unique additional information such as the size of the viewing audience and the number of times the media were used in separate showings. These data are not possible on the ALA form (See Figure 2). Use of a commonly accepted interlibrary loan form will help standardize procedures, provide transaction records and assist in compiling use statistics necessary for good resources management.

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[5]"National Interlibrary Loan Code, 1968," College and Research Libraries News, No. 8, September, 1968, pp. S-271-272.

Mailing Considerations

There are four basic transporation options for conducting inter-library loan services.

1. Private Messenger -

   Advantages - customized service which can respond more uniquely to individual situations and institutions.

   Disadvantages - status of insurance for materials is questionable.

2. Bus Freight -

   Advantages - can carry larger, bulkier packages than U.S. Mail. Is relatively inexpensive for large mailings. Can insure packages for more than $200.00 limit set by U.S. Postal Service.

   Disadvantages - transport to and from bus depot must be provided. More expensive for light packages.

3. United Parcel Service -

   Advantages - door to door pick up and delivery usually available. Will insure for more than $200.00 limit set by U.S. Postal Service. Will carry heavier, bulkier items than U.S. Postal Service. Usually faster than U.S. Mail.

   Disadvantages - more costly for smaller packages or when volume of shipping is low. At door pick up charge is extra.

4. U.S. Mail -

   Advantages - delivery service to the door is available to all points in the U.S. and internationally. "Best buy" for shipping small, light packages, or when volume of shipping is low. Fees vary upon distance, weight, insurance and class of service chosen.

Disadvantages - insurance of packages only to $200.00 limit. Delivery time for U.S. Mail has been increasing. Routings to outlying areas are often indirect and slow.

Whichever mode of transportation is chosen, be sure to:

1. Use interlibrary loan forms to document all transactions.

2. Wrap packages carefully. Provide adequate insulation to protect delicate materials.

3. Always insure packages against loss or damage.

4. Provide adequate transportation time in processing all transactions.

Sample interlibrary loan policy and procedures are found on page 42.

AMERICAN LIBRARY ASSOCIATION
INTERLIBRARY LOAN FORM
FIGURE 1

☐ BORROWING LIBRARY →

FILL IN LEFT HALF OF FORM INCLUDING BOTH LIBRARY ADDRESSES IN FULL

SEND SHEETS A, B AND C TO LENDING LIBRARY AND ENCLOSE SHIPPING LABEL

FOLD →

A REQUEST

DATE OF REQUEST:

CALL NO: | BORROWING LIBRARY (address in full)

FOR USE OF | STATUS | DEPT.

AUTHOR (or periodical title, vol. and year)

TITLE (with author & pages for periodical articles) (Inc. edition, place & date) ☐ This edition only

VERIFIED IN (or source of reference)

IF NON-CIRCULATING, PLEASE SUPPLY ☐ MICROFILM ☐ HARD COPY IF COST DOES NOT EXCEED: $

LENDING LIBRARY →

FILL IN PERTINENT ITEMS UNDER REPORTS, RETURN SHEETS B AND C TO BORROWING LIBRARY

LENDING LIBRARY (address in full)

NOTE: The receiving library assumes responsibility for notification of non-receipt.

AUTHORIZED BY: (full name)

TITLE

INTERLIBRARY LOAN REQUEST

ACCORDING TO THE A. L. A. INTERLIBRARY LOAN CODE

REPORTS: CHECKED BY

SENT BY ☐ LIBRARY RATE ☐

CHARGES $ INSURED FOR $

DATE SENT:

DUE:

RESTRICTIONS:

☐ COPYING NOT PERMITTED

☐ FOR LIBRARY USE ONLY

☐

NOT SENT BECAUSE:

☐ NON-CIRCULATING ☐ NOT OWNED ☐ IN USE

☐

ESTIMATED COST OF: MICROFILM

HARD COPY

BORROWING LIBRARY RECORD:

DATE RECEIVED

DATE RETURNED

BY ☐ LIBRARY RATE ☐

POSTAGE ENCLOSED $ INSURED FOR $

RENEWALS: (REQUEST AND REPORT ON SHEET C)

REQUESTED ON

RENEWED TO

(OR PERIOD OF RENEWAL)

DEMCO
NO. 65-250

40

49

50

INTER-INSTITUTIONAL AV LOAN REQUEST

Date of request:

Call No.: Borrowing Institution (address in full)

For use of Status Dept.

Title

Producer: Date:

Format:

Verified in (or source of reference)

Lending Institution (address in full)

NOTE: The receiving inst. assumes responsibility for notification of non-receipt.

Authorized By: (full name)

Title

REPORTS: Checked By

Sent By ☐ Library Rate ☐

Charges $ Insured For $

Date Sent:

Due:

RESTRICTIONS:

☐ No copying

☐ In House Use Only

☐

NOT SENT BECAUSE:

☐ Non-circulating ☐ Not owned ☐ In use

RENEWALS: (Request and Report on Sheet C)

Requested on

Renewed to

(or period of renewal)

BORROWING INSTITUTION RECORD:

Date received

Date returned

By ☐ Library rate ☐

Postage enclosed $ Insured For $

Audience: Persons

Shown in Viewings

Comments:

AUGUSTA AREA COMMITTEE FOR HEALTH INFORMATION RESOURCES
INTER-INSTITUTIONAL AV LOAN REQUEST
FIGURE 2

AUGUSTA AREA COMMITTEE FOR HEALTH INFORMATION RESOURCES*
INTER-INSTITUTIONAL LOAN POLICY

Introduction

The following Inter-Institutional Loan Policy is written as a guide to the conduct of inter-institutional loans made among Augusta Area Committee for Health Information Resources members. It is designed as a preliminary document, subject to review and modification based on actual loan experiences. It is suggested that this document be revised, if necessary, and presented to the AACHIR as a whole.

Approval by the Steering Committee of AACHIR will implement this as a temporary working document.

1. Who May Borrow

a) Individuals in an institution may borrow from the collection held by that institution as an individual borrower.

b) Individuals needing materials held in a collection of another participating institution must request the loan of these materials through their designated institutional representative. Thus the institution accepts responsibility for loss or damage to materials borrowed.

Eg., An MCG faculty member may borrow a set of slides from the MCG Library as an individual. He cannot, however, directly borrow materials from Gracewood or Fort Gordon. This will be done via MCG's representative to the AACHIR, namely the Coordinator of Audiovisuals of the MCG Library. The MCG Library, therefore, will take necessary steps to assure the proper use of this borrowed material.

2. What May Be Borrowed

Audiovisual programs may be borrowed under the auspices of the AACHIR agreement provided that:

a) They are available to be borrowed from the institution by which they are owned. (Eg., reserve materials, conflicting booking dates, private ownership, etc. could thus make materials unavailable for loan).

b) They are not subject to copyright or loan restrictions by the producer or distributor of the item.

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*c/o Audiovisual Service, Medical College of Georgia Library, Augusta, GA.

c) Arrangements have been made for proper support hardware in the borrowing institution.

d) An inter-institutional loan form has been completed for each item requested.

3. How May It Be Borrowed

a) An inter-institutional loan form must be submitted to the institution owning the audiovisual for each title requested. (See example of Inter-Institutional loan form.)

b) The loan period will be for two weeks unless specific arrangements are made otherwise.

c) All loans not picked up by institutional messenger will be sent by U. S. Mail or the most efficient alternative carrier (eg., Greyhound Bus).

d) All packages sent by common carrier will be insured for a value great enough to ensure reimbursement if the package is lost or to a value mutually agreed upon by the lending and borrowing institutions.

e) Borrowing institutions may not copy any materials borrowed unless written permission has been obtained from the holder of the copyright. These written permissions will be kept on file with the AACHIR representative from the institution desiring to make the copy.

f) Borrowing institutions will be responsible for completing the portion of the inter-institutional form dealing with audience viewing statistics.

g) Borrowing institutions should report any difficulty they had with operation of software to the lending institution. This may be done on the inter-institutional lending form under Comments (eg., Tape sticks, scratch on slide #7, film leader broke during threading, etc.).

Responsibility for Borrowed Items

Individuals and/or institutions borrowing materials under the auspices of the AACHIR accept responsibility for the careful use and handling of said items. Any loss or damage to borrowed materials will be the responsibility of the borrower. Failure to meet this responsibility will result in loss of borrowing privileges.

AUGUSTA AREA COMMITTEE FOR HEALTH INFORMATION RESOURCES
Instructions for Sending
Inter-Institutional Loan Forms

Borrowing Institution	1. Fills in all of left half of form including both institutions' addresses.
	2. a) Sends white, yellow and pink copies to lending institution. b) Sends a mailing label (with borrower's address) to lender to facilitate borrowing the materials requested. c) Keeps goldenrod copy in borrower's files.
Lending Institution	3. a) Receives requests (white, yellow and pink) from borrowing institution. b) Completes appropriate sections of the right half of the form.
	4. Returns yellow and pink copies to the borrowing institution under separate mailing. Copies will now be distributed as follows: White copy - retained for lender's files Yellow copy- to be used for borrower's files Pink copy- to be used if borrower requires renewal of loan
Borrowing Institution	5. Sends pink copy to lending institution requesting renewal of loan of materials.
Lending Institution	6. a) Completes right half of pink form indicating if renewal is possible, and period of time allowed by this renewal. b) Notes renewal date on their white file copy.
	7. Returns pink form to borrower.
Borrowing Institution	8. Returns materials to lender on date specified, via appropriate method of shipping and insured for the proper amount.
	9. Fills in appropriate audience information. Returns goldenrod copy of loan under separate cover to lender. (This reports to lender that the item has been mailed).

Copies are now distributed as follows:

Borrower	Yellow - for borrower's records Pink - discard
Lender	White - showing request and final Goldenrod completion of the loan

OPTIONS FOR "MAILING" AUDIOVISUAL PACKAGES

1. Private Messenger: Gracewood, Fort Gordon, and the Veterans Administration all have this service established between MCG and their respective institutions. Additional services would be the responsibility of the individual institutions involved in the loaning process.

   Disadvantage: Status of insurance for programs is questionable.

2. Greyhound Bus: (404) 724-8851 (Augusta Station)

   Examples:

   Aiken - from MCG
   Minimum $2.20 charge per package
   Insurance - 25¢ per $50-$150 value
   50¢ per $151-$250 value
   6 buses daily
   7AM - 8PM
   No Sundays

   Thompson - from MCG
   Minimum $2.00 charge per package
   Insurance - 25¢ per $50-$150 value
   50¢ per $151-$250 value
   7 buses daily
   7AM - 8PM
   No Sundays

   Disadvantages:
   a) more expensive for light packages.
   b) transport needed from point of origin to bus station on both ends of the process.

3. United Parcel Service: (404) 691-6600 (Collect)

   Example:
   10 pound package - $1.20 to Aiken or Thompson. This would be automatically insured for $100. Each additional $100 value insurance costs 25¢.

   They will pick up at an institution for a flat fee of $2.00 per week. (Monday-Friday)

   Call customer service at above number for pick-up and additional information.

   Disadvantage: More expensive if only one small package is shipped per week.

4. U. S. Mail: Fees vary depending upon distance, weight, and insurance. Time for delivery should run two to five days.

   Disadvantage: Delivery time for the U. S. Mail has been increasing. Routings to outlying areas are often indirect and slow.

Acquisition

Developing a written acquisitions policy

The librarian in conjunction with the Library/Learning Resources Center Committee should develop a written acquisitions policy based upon program goals and objectives established as a result of initial surveys and subsequent program developments. This policy should outline:

1. What will be purchased with regard to
   a. Subject matter to be covered
   b. Format of materials to be purchased
2. Preview-for-purchase policy and prior review by expert panel
3. How and where these materials will be housed
4. Policy regarding gifts and donations
5. Who may initiate requests for title to be purchased and procedures for requesting new media
6. Policy of the learning resources center regarding copyright
7. Particular selection considerations regarding subject content e.g. Attempt should be made to select materials which will not become easily dated; which materials dealing with subjects such as sexuality, psychiatry, medical-ethical problems, and related topics should be chosen carefully to assure that content is being presented in an unbiased, tasteful and accurate manor.

8. Cost considerations
9. Materials projected to have heavy use rather than less used or esoteric items
10. Technical quality considerations

Once a written acquisitions policy has been developed, and utilizing producer/distributor catalogs and related reference tools previously discussed, the librarians is now ready to begin acquiring audiovisual materials.

Hicks and Tillins have suggested the flow of acquisitions activities

(See page 49)

Acquisition suggestions

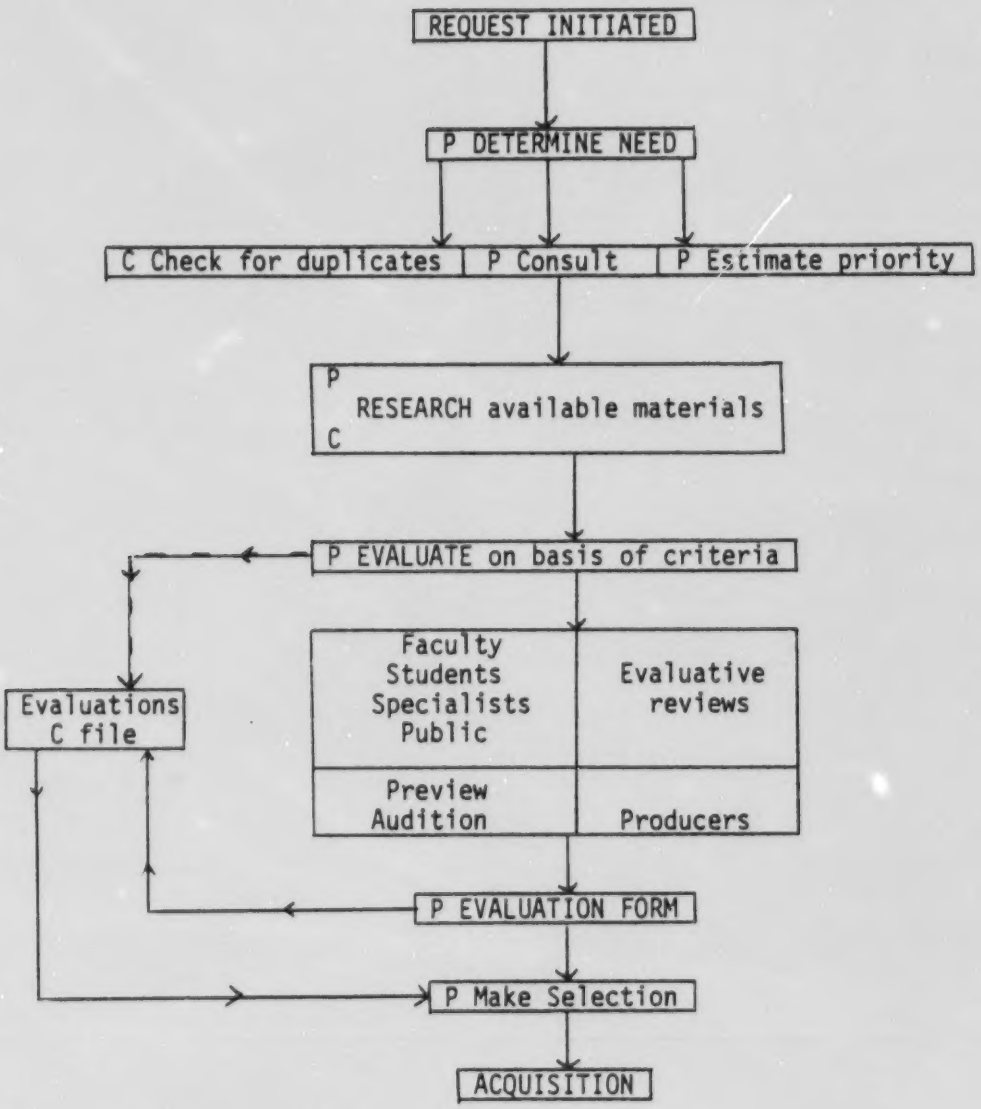
Brantz offers the following reminders for dealing with producer/distributors:

AUDIOVISUAL DISTRIBUTOR REQUIREMENTS

Distributors are often the producers of the software. Most distributors need a return on their product. Furthermore, production costs are high. And finally, the health science market is limited in size compared to other educational markets.

(1) Distributors usually allow for payment through an invoice system. However, don't be surprised if some require prepayment.
(2) Figure on four to six weeks delay from time of order to time of receipt of the audiovisual program. Telephoning the order can often reduce this time period by half.
(3) Most distributors will allow the rental charge to be applied to purchase if purchase takes place within 30 days.

SELECTION WORK-FLOW CHART[2]



CODE: C-Clerical procedures
P-Professional procedures
- ——-Alternate procedures

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[2]Hicks, Warren B. and Tillins, Alma M. Developing Multi-Media Libraries. New York: R. R. Bowker, 1970. p. 38.

(4) Many distributors sell their software in a variety of formats to insure sales. Don't be afraid to request a format not shown in the catalog; the distributor may have the one you want. Example: advertised filmstrips--you may be able to buy the same program in slides.[1]

Copyright

Audiovisuals vary in ease of duplication. The audiocassette is the easiest. Someone once said that the videocassette is the Xerox machine of the audiovisual world. However, we strongly recommend that you do not violate the copyrights of others. You are hurting their return on the production. In addition, you may lose a source of audiovisual programming by denying the producer needed income.[2]

If you intend to purchase the format offered by a distributor and then convert it to another format which better meets the needs of your program, it is wise to specify this intent as well as the intended use of such materials on the purchase order and at the time or purchase. Acceptance of the purchase order by the vendor with these terms specified in writing at the time of purchase implies acceptance of these purchase terms. This announcement of intent has worked successfully with many vendors.

A sample of such a statement would be that utilized by the Medical College of Georgia on all purchases of 16 mm. film (See example on page 51)

Remember! Duplication of copyrighted materials without written permission of the copyright holder is illegal!

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[1]Brantz, Malcolm. Basic Media Management-Software. Chicago: Medical Library Association, 1976. p. 15.

[2]Brantz, Malcolm. Ibid.

MEDICAL COLLEGE OF GEORGIA DISCLAIMER STATEMENT FOR 16 MM. FILM

The following disclaimer is noted on any purchase of 16 mm. film.

Request permission to make one working 3/4 in. videotape cassette to be used for close circuit TV on campus, for classroom teaching purposes for student.

Medical College of Georgia utilizes a multi-channel, multi-receiver, closed circuit distribution system for delivery of live and recorded (film and videotape) information.

Response by any distributor/producer to this purchase request acknowledges approval for use of his product over the above described system.

Evaluation

Developing an evaluation procedure

Evaluation is a difficult process in that it can be time consuming for staff, difficult and costly in rental fees to acquire the materials, and difficult to assemble a peer review committee of busy professional and technical personnel, but it is an essential activity necessary to assure quality control in the collection. A model review committee might include a subject matter specialist, students or intended learners, an educator or learning specialist and a technical expert. Not utilizing a preview for purchase evaluation system can result in monies spent on materials not appropriate to subject coverage of the collection, of poor technical quality, inaccurate in subject content, or inappropriate for the intended audience. The Health Science Consortium, Chapel Hill, North Carolina, has developed an excellent evaluation form which is reproduced on page 53.

SAMPLE REVIEW FORMS

Instructional Materials Appraisal Instrument [3]

Health Sciences Consortium

Appraiser's Name _____ (Faculty ___ Student ___) College _____

Department _____ Title of Material _____

Author(s) _____ Today's Date _____

Directions: All study guides or manuals should be perused prior to viewing materials for appraisal. Use reverse side for comments if necessary. Use the following code in responding to statements. Circle the number which applies.

5 – STRONGLY AGREE 4 – AGREE 3 – NO OPINION (or not applicable) 2 – DISAGREE 1 – STRONGLY DISAGREE

I. CONTENT QUALITY

	SA	A	N/A	D	SD
A. Accuracy of Content					
1. Content is up-to-date	5	4	3	2	1
2. Factual information is accurate	5	4	3	2	1
3. Visual representation of the content is accurate	5	4	3	2	1

COMMENTS _____

B. Appropriateness of Content					
4. Material contributes relevant information to the topic under study	5	4	3	2	1
5. Content is consistent with established practice in the field	5	4	3	2	1
6. Content is appropriate for the intended audience	5	4	3	2	1
7. Content is useful for the intended audience	5	4	3	2	1

COMMENTS _____

C. Scope and Organization of Content					
8. The content is well organized	5	4	3	2	1
9. The organization of the content is efficient	5	4	3	2	1
10. Amount of information presented is adequate to cover the objectives	5	4	3	2	1

COMMENTS _____

D. Overall Appraisal of Content Quality

11. Overall quality of the content is: (Circle One)

Excellent	5
Good	4
Fair	3
Poor	2
Unacceptable	1

COMMENTS _____

E. Area of Major Weakness

12. Area of major content weakness is: (Circle One)

No major weakness	5
Accuracy	4
Appropriateness	3
Scope and Organization	2
Others as listed in comments below	1

COMMENTS _____

II. TECHNICAL QUALITY

	SA	A	N/A	D	SD
A. Audio Visual					
13. Sound is not distorted	5	4	3	2	1
14. Quality of narration is good	5	4	3	2	1
15. Illustrations are clear	5	4	3	2	1
16. Inferences of size, distance, action, and life-likeness are good	5	4	3	2	1

COMMENTS _____

B. Overall Appraisal of Technical Quality

17. Overall technical quality of the program can best be described as: (Circle One)

Excellent	5
Good	4
Fair	3
Poor	2
Unacceptable	1

COMMENTS _____

C. Area of Major Weakness

18. Area of major technical weakness is: (Circle One)

No major weakness	5
Sound	4
Visualization	3
Illustration	2
Others as listed in comments below	1

COMMENTS _____

III. EDUCATIONAL QUALITY

	SA	A	N/A	D	SD
A. Objectives					
19. Objectives are clearly stated	5	4	3	2	1
20. There is agreement between the objectives and the evaluation instrument	5	4	3	2	1
21. There is agreement between objectives and content	5	4	3	2	1

COMMENTS _____

B. Guides (Workbook)					
22. Instructional guide is well organized	5	4	3	2	1
23. Instructional guide facilitates the student's use of the materials	5	4	3	2	1

COMMENTS _____

C. Instructional Design					
24. Content is communicated efficiently	5	4	3	2	1
25. Sequence is logical	5	4	3	2	1
26. Cues are effective	5	4	3	2	1
27. Adequate review is provided	5	4	3	2	1
28. Presentation is not boring	5	4	3	2	1
29. Selection of media is appropriate	5	4	3	2	1
30. Visuals contribute to the understanding of the content	5	4	3	2	1
31. Pacing is effective	5	4	3	2	1

COMMENTS _____

D. Evaluation					
32. Opportunities for student self-evaluation are adequate	5	4	3	2	1
33. Evaluation items reflect the objectives	5	4	3	2	1

COMMENTS _____

E. Overall Appraisal of Educational Quality

34. Program as an instructional tool is: (Circle One)

Excellent	5
Good	4
Fair	3
Poor	2
Unacceptable	1

COMMENTS _____

F. Area of major weakness

35. The area of major weakness is: (Circle One)

No major weakness	5
Objectives	4
Guides	3
Design	2
Evaluation	1

COMMENTS _____

PLEASE ANSWER THE FOLLOWING QUESTIONS AFTER COMPLETING THE APPRAISAL. (Circle the appropriate answer.)

36. Major area of weakness for these materials is:

CONTENT EDUCATIONAL TECHNICAL NONE

37. Materials are most suitable for:

UNDERGRADUATES GRADUATES POSTDOCTORAL

38. Overall how would you rate the quality of the program?

EXCELLENT GOOD FAIR POOR UNACCEPTABLE

39. Overall how would you rate the effectiveness of the program?

EXCELLENT GOOD FAIR POOR UNACCEPTABLE

Please feel free to add additional comments.

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OVER

Please Read

Note to Appraiser

Please keep in mind that by appraising an instructional program, you are merely applying a set of criteria to indicate the possible effectiveness of the instructional program to meet its own stated objectives. It is important that you do not impose your own objectives or instructional biases upon the program . Whether or not you "like" the program is not the question, but rather in your opinion, will the program, in its present form, enable users to achieve the stated objectives.

Directions for the Appraiser

The purpose of this form is to provide a basis for the subjective evaluation of instructional programs. To insure an accurate and representative appraisal we ask that you keep in mind the guidelines below.

First, do not let your ratings in one section affect your ratings in another. If a particular program happens to be "technically" good, but "educationally" poor, be sure you mentally separate these judgments.

Second, avoid the "N/A" category as much as possible. Use this category only when you have absolutely no opinion, or if the item mentioned is absent from the program.

Third, keep in mind the purpose of the program when making judgments of its probable effectiveness. The objectives specify the purpose of the program, therefore, judge the program's effectiveness on whether or not it accurately reflects the objectives.

Finally, do not let your personal feelings interfere with your professional judgments. Rate the program strictly on whether it is likely to be an effective learning device, not on whether it reflects local procedures or methods.

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[3]Reprinted with permission of: Health Sciences Consortium, Inc., 200 Eastowne Drive, Suite 213, Chapel Hill, North Carolina 27514.

TECHNICAL PROCESSING

Cataloging

The National Library of Medicine is currently using the Anglo American Cataloging Rules, (AACR), Chapter 12 Revised, to catalog audiovisual media and special instructional materials. AACR Chapter 14, Revised, which was published in 1976, provides rules for cataloging the following various types of aural recordings: discs, cartridges, cassettes, etc.

Both of these revised chapters should be reviewed before attempting to catalog.

SELECTED LIST OF BASIC CATALOGING TOOLS FOR HEALTH SCIENCE AUDIOVISUAL CATALOGERS[1]

Anglo-American cataloging rules. North American text with supplement of additions and changes. Chicago: American Library Association, 1970. Paper,$5.00; Cloth,$10.00.

--Anglo-American cataloging rules, chapter 6. Separately published monographs, incorporating ch. 9, "Photographic and other reproductions" and revised to accord with the International Standard Bibliographic Description (Monographs). North American text. Chicago: American Library Association, 1974. Paper,$2.50.

--Anglo-American cataloging rules, chapter 12 revised. Audiovisual media and special instructional materials. North American text. Chicago: American Library Association, 1975. Paper,$1.50.

--Anglo-American cataloging rules, chapter 14 revised. Sound recordings. North American text. Chicago: American Library Association, 1976. Paper,$1.00.

National Library of Medicine classification. 3rd edition with 1969 supplementary pages added. Bethesda, Md.: Public Health Service, National Institutes of Health, 1969. For sale by the Supt. of Docs., U.S. Gov't Print. Ofc., Washington, D. C. 20402. Paper,$3.85.
A scheme for the shelf arrangement of books in the field of medicine and its related sciences.

--Additions and changes to the NLM Classification, 3rd ed. with 1969 supplementary pages are listed in Notes for Medical Catalogers, issues

No. 9 November, 1970
No. 10 August, 1971
No. 11 November, 1971
No. 12 November, 1972
No. 13 November, 1973

Later numbers of Notes for Medical Catalogers issued by the National Technical Information Service, Springfield, Va. 22151.

Library of Congress Classification. Schedules for sale from Cataloging Distribution Service Division: Library of Congress.

B - pt. I B-BJ Philosophy	$2.25
H - Social Sciences	$4.25
L - Education	$2.00
Q - Science	$9.00
Z - Bibliography and Library Science	$2.25

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[1]The titles listed in this cataloging section are repeated in the "Selected References."

Medical Subject Headings, annotated alphabetic list, 1977. National Library of Medicine. Springfield, Va.: National Technical Information Service, 1976. PB 255 932 Annual publication. Paper,$16.25.

Medical Subject Headings, tree structures, 1977. National Library of Medicine. Springfield, Va.: National Technical Information Service, 1976. PB 255 933 Annual publication. Paper,$12.00.

GENERALIZED CATALOG CARD

Retrieval
Nos

Title. [Medium designator] / Person or body chiefly responsible for work ; Producer. -- Edition. -- Place of publication : Publisher, Year.
Physical description. -- (Series)

Notes

1. Subject heading 2. Subject heading I. Added entry II. Added entry III. Added entry

Sample catalog entry for a motion picture

WE
350
MP 16
No. 1
1971

Gout. [Motion picture] / Burroughs Wellcome Co. ; produced by Medcom. -- Research Triangle Park, N.C. : Burroughs Wellcome, c1971.
1 reel, 37 min. : sd., col. ; 16 mm. & monograph on gout. -- (Medcom learning systems)

Credits: Paulding L. Phelps et al.
Summary: Program discusses gout, its presence throughout history and its cause. The treatment of gout using allopurinol is also discussed.

1. Gout 2. Allopurinol I. Burroughs Wellcome Company II. Medcom learning systems. [Motion picture] III. Phelps, Paulding L.

Sample catalog entry for a slide set

WE
559
SL
No. 1
1977

Muscular dystrophy. [Slide] / Donald L. Schotland. -- New York : Medcom, c1977.
100 slides : col. ; 2x2 in. & script. -- (Medcom famous teachings in modern medicine)

SUMMARY: A comprehensive review of muscular dystrophy and other neuromuscular disorders.

1. Muscular dystrophy 2. Neuromuscular diseases I. Schotland, Donald L. II. Medcom famous teachings in modern medicine. [Slide]

Sample catalog entry for a filmstrip

WB
430
FC
No. 5
1976

Vegetarianism in a nutshell. [Filmstrip] / Patricia White ; produced by Polished Apple. -- Malibu, Calif. : The Apple, 1976.

83 fr. : col. ; 35 mm. & cassette (2-track. mono. 14 min.)

Sound accompaniment compatible for manual and automatic operation.

SUMMARY: Program discusses why people become vegetarians, the different types of vegetarian diet, and the dietary precautions.

1. Vegetarianism I. White, Patricia

Sample catalog entry for an audiocassette

WX
159
AC
No. 99
1977

Increasing employee productivity [Sound recording] / George S. Odiorne. -- New York : Amacom, 1976.
1 cassette. 2-track mono. -- (Objective focused management)

DURATION: 15 min.
SUMMARY: Program introduces ways to increase hospital employee productivity, to correct sources of low productivity, and to structure a producing organization.

1. Efficiency 2. Hospital personnel I. Odiorne, George S. II. Objective focused management. [Sound recording]

Sample catalog entry for an audiocassette serial

Note: Use a periodical check-in card to indicate the arrival of each program.

Audio digest: pediatrics. [Sound recording]
v. 18- Jan. 1972- Glendale, Calif.,
Audio Digest Foundation.
v. (cassettes) 2-track. mono.
biweekly.

Indexes:
Vols. 18-23, 1972-1976.

See serial holdings for pieces held.

1. Pediatrics

Sample catalog entry for a videocassette

WJ
300 Acute renal failure. [Videorecording] /
VT 3/4 John L. Bonn ; produced by University of
No. 89 Oxford Dept. of Medicine. -- Wallingford,
1976 Conn. : PreTest Service, c1976.
1 cassette, 21 min. : sd., col. ;
3/4 in.

SUMMARY: Program correlates structure and function in acute renal failure. Emphasis is placed on its diagnosis and treatment.

1. Kidney failure, acute I. Bonn, John L.
II. University of Oxford Department Medicine

AACR Rule 23 - Source of the Description

Rule 23 specifies three primary sources of description in the prescribed order: 1. the work itself, including the container when it is an integral part of an item 2. accompanying material, including manuals, guides, and information supplied by the producer 3. the container, when it is not an integral part of the item and can be thrown away.

AACR Rule 220 - Main Entry

The National Library of Medicine deviates from Chapter 12, Revised and uses title main entry for audiovisuals. This policy was adopted because the primary responsibility for audiovisual works is often missing or extremely ambigious.

AACR Rule 221 - Added Entries

Added entries are most often made for:

1. the work on which the audiovisual is based, or in some way closely related
2. the person or body responsible for originating the work
3. the person or body responsible for the production of a work The National Library of Medicine only makes added entries for government, academic or research institutions acting as producers. Commercial producers are not traced.
4. the series
5. the entry for the original version and the English version of an audiovisual when cataloging a version different from these
6. variations in title. The general rules stated in AACR Rule 33 also apply to audiovisual works.

AACR Rule 225A - Title

The title of the work is transcribed exactly as it appears except for capitalization and punctuation. See Rule 134 for punctuation and other details.

AACR Rule 225B - Medium Designator

The medium designators, enclosed in brackets, indicate the category of materials to which the work belongs. Chapter 12 defines the following generic designators in its glossary:

Chart
Diorama
Filmstrip
Flash Card
Game
Kit
Microscope Slide
Model
Motion Picture
Realia
Slide[2]
Transparency
Videorecording

AACR Rule 225C - Statement of Responsibility

An audiovisual presents a problem in determining the person or body primarily responsible for the work. It is often difficult to determine what function a person or body assumed in the creation of the work. The statement of responsibility includes the person or body responsible for the artistic, conceptual, creative portion of the work and also the person or body responsible for the physical production of the work.

AACR Rule 226 - Edition

Always include the edition statement found on the source in the catalog entry.

AACR Rule 227 - Release/Publication

The release/publication area consists of the three following parts in prescribed order:

1. the location of the publisher, releasing agent, or other person or body responsible for issuing the work.

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[2]The National Library of Medicine considers slide/tape packages to be predominantly slide format and they are cataloged with the medium designator slide.

2. the name of the publisher, releasing agent, or other person or body responsible for issuing the work.
3. the year of release or publication.

AACR Rule 228 - Physical Description

The physical description area is similar to the collation area for books. It identifies, in this order, the number of items, running time, sound and color characteristics, and dimensions.

Tables 1 and 2 provide guidelines for the physical description of several different formats.

TABLE 1

SUMMARY OF PROVISIONS FOR PHYSICAL DESCRIPTIONS[3]

Medium	Extent	Col., sound, etc.,	Dimensions	Accompanying Material
Chart	number of charts or flipcharts (number of sheets indicated parenthetically)	col./b&w statement	height x width in cm.	teacher's guide, study guide, etc.
Diorama	The formal physical description area is omitted; instead the first note gives size of assembled display, number of figures, material of construction, etc.			
Filmstrip	number of frames or double frames or number of rolls	col./b&w statement (filmslips specified in notes area)	width of film in mm.	teacher's guide study guide, etc.; sound accompaniment
Flashcard	number of cards	col./b&w statement	height x width in cm.	teacher's guide study guide, etc.
Game	number of pieces(or "various pieces")or enumeration of components	col.and dimensions statements for pieces and dimensions of container (in cm.) integrated with extent statement		teacher's guide, study guide, etc.
Kit	enumeration of component media integrated with col. and dimensions statement (lengthy data specified in notes area), dimensions of container (in cm), and statement of accompanying material			
Microscope slide	number of slides	"stained" statement (type of stain specified in notes area)	no size statement	teacher's guide, study guide, etc.

[3]Anglo-American Cataloging Rules, Chapter 12 Revised. Audiovisual Media and Special Instructional Materials, North American Text. Chicago: American Library Association, 1974. pp. 32-3.

TABLE 1 CONTINUED

Model	number of models or mock-ups	col. statement or color names (scale, material, etc., in notes area)	height x width or height x width x depth in cm.	teacher's guide, study guide, etc.
Motion picture	number of reels, cassettes, or cartridges, with running time in min.	sd./si. statement and col./b&w statement	width of film in mm.	teacher's guide, study guide, etc.
Realia	enumeration of pieces OR The formal physical description area is omitted; instead a description is given in the notes area.	col. statement or color named	height x width or height x width x depth in cm.	teacher's guide, study guide, etc.
Slide	number of slides, stereoscope slides, or slides (glass)	col./b&w statement	height x width of mount in in.	teacher's guide, study guide, etc.; sound accompaniment
Transparency	number of transparencies(overlays indicated parenthetically)	col./b&w statement	height x width of mount in cm.	teacher's guide, study guide, etc.
Videorecording	number of reels, cassettes, cartridges, or discs, with running time in min.	sd./si.,col./b&w and (for discs) rpm statements	width of tape in in., diamter of disc in in.	teacher's guide, study guide, etc.

TABLE 2

SUMMARY OF PROVISIONS FOR PHYSICAL DESCRIPTION

Medium	Extent	Dimensions
Sound recording		
1. Disc	number of discs, speed (in revolutions per minute), one of the following terms: mono., stero., or quad.	diameter of disc in inches
2. Cylinder	number of cylinders	length and diameter of cylinder
3. Tape	a. for an open reel tape, the number of reels, playing speed (in inches per second) number of tracks, one of the following terms: mono., stereo., or quad.	reel diameter and tape width
	b. for tape in cassettes or cartridges, the number of cassettes or cartridges, number of tracks, dimensions, one of the following terms: mono., stereo., or quad.	length and width of cassette (if other than 3 7/8 x 2 1/2 inch) or cartridge (if other than 5 1/4 x 7 7/8 inch)
4. Roll	number of rolls	

AACR Rule 229.1 - Series

The series statement is enclosed within parentheses.

AACR Rule 229.2 - Notes

Notes provide useful supplementary information about the work. A complete list of the different types of notes is in AACR Chapter 12, Revised.

Following is a partial list of useful notes:

Earlier titles
Variations in title
Extension of physical description
Accompanying material
Related works
Intended users (audience level)
Cast members
Credits
Summary of contents (abstract)
Contents

Subject headings

Medical Subject Headings (MeSH) is a list of all subject headings (descriptors) used by indexers and catalogers in the National Library of Medicine. The MeSH subject descriptors are the words used in the catalog to index the subject content of the work.

Examples of Complete Retrieval Numbers Using

The National Library of Medicine Classification

Example of NLM's retrieval number:

WJ	
301	NLM Classification
SL	Media Designator*
No. 153	Accession Number
1976	Year

Example of Medical College of Georgia's (MCG) new retrieval number:

SLIDE	Media Designator*
WJ	
301	NLM Classification
153	Accession Number
1976	Year

*The following pages list the different medium designators used by the National Library of Medicine and the Medical College of Georgia.

National Library of Medicine (NLM) Media Designators

Audiocassette	AC
Audiotape	AT
Chart	CH
Computer-aided-instruction	CA
Diorama	DI
Filmslip	FL
Filmstrip/cassette	FC
Filmstrip/disc	FD
Filmstrip	FS
Filmstrip/tape	FT
Game	GA
Flashcards	HA
Kit	KT
Microfilm	MI
Microfiche	MF
Models	MO
Motion picture (16 mm.)	MP16
Motion picture (8 mm.)	MP8
Motion picture (super 8 mm.)	MPs8
Phonodisc	PD
Picture	PI
Programmed text	PT
Realia	RA

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NLM Media Designators Continued

Slides	SL
Microscope slides	SM
Stereoscope slide	SS
Slide/cassette	SC
Slide/tape	ST
Transparency	TR
Videocassette	VC
Videocassette/slide	VS
Videotape (1/4 in.)	VT1/4
Videotape (1/2 in.)	VT1/2
Videotape (3/4 in.)	VT3/4
Videotape (1 in.)	VT1
Videotape (2 in.)	VT2

Medical College of Georgia (MCG) Media Designators

Audiocassette	Audio
Chart	Chart
Filmstrip	Filmst
Kit	Kit
Model	Model
Motion Picture	Film
Realia	Realia
Slide	Slide
Typescript	Script
Videotape	Video

Examples of Retrieval Numbers for Audiovisuals

Items being Classified	NLM Medium Designator, Accession Number	NLM Medium Designator, Year Accessioned & Accession Number	MCG Medium Designator, NLM Classification, Accession Number, Year	NLM Classification, NLM Medium Designator, Accession Number, Year
SLIDE SET Psychoanalysis of Children	SL 150	SL 76-150	SLIDE WS 350 No. 150 1976	WS 350 SL No. 150 1976
3/4" VIDEOCASSETTE Down's Syndrome part 1	VT 3/4 90 Pt. 1	VT 3/4 76-90 Pt. 1	VIDEO WM 300 No. 90 1976 Pt. 1	WM 300 VT 3/4 No. 90 1976 Pt. 1
Down's Syndrome part 2	VT 3/4 90 Pt. 2	VT 3/4 76-90 Pt. 2	VIDEO WM 300 No. 90 1976 Pt. 2	WM 300 VT 3/4 No. 90 1976 Pt. 2

Audiovisual Packaging[4]

A wide assortment of packaging containers for audiovisual software is available from library suppliers. Before making decisions as to which containers are best, the following considerations should be made:

1. Cost of container
2. Usefulness of the software in a particular package

   Example: Individual slides versus Carousel tray of slides
3. Size and shape of container (can the container be labeled, shelved and circulated)
4. Durability or life expectancy of container
5. Protection provided by the container

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[4]Malcolm H. Brantz. Basic Media Management-Software. Chicago: Medical Library Association, 1976. p. 35.

Audiovisual Labeling

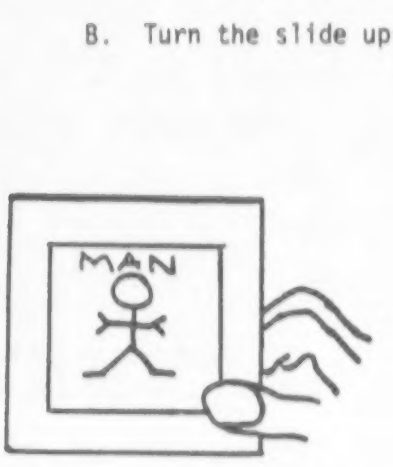
Introduction

The labeling of audiovisual items is extremely important because, unlike monographs, audiovisuals often have several pieces such as slides, pamphlets, and scripts which must stay together to make sense. For example, if one slide is found on the floor it must have appropriate labeling in order to return it to the set to which it belongs. Individual items such as pamphlets and slides are easily lost and are expensive to replace. If the learning resources center can prevent loss of materials by labeling, it can save money and better serve the patron.

Procedures for Labeling

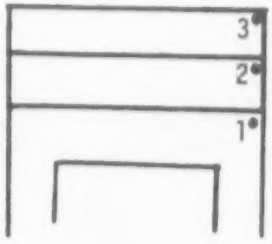
Format: Slides in Kodak Carousel Box

1. Indicate correct position for "traying" slides
   A. Hold slide up to light or place it on a light box so that you can see the picture in the correct position.
   B. Turn the slide upside down.

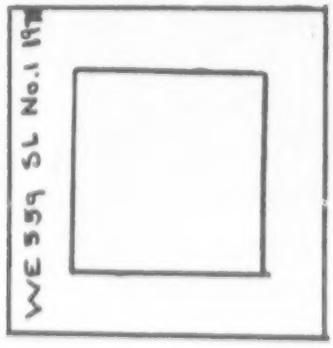


C. Place a thumbspot in the top right hand corner of the slide.

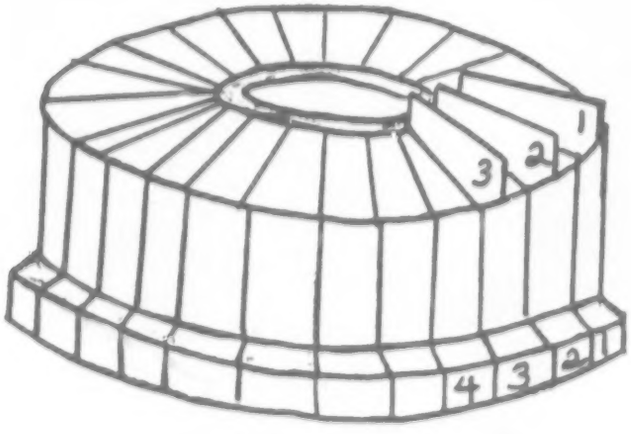
2. Number slides in sequential order



3. Label each individual slide with the retrieval number



4. Place slides in numerical order in the Kodak carousel slide tray. When "traying" the slides, the number in the top right hand corner of the slide should be increasing in the same direction as the permanent number on the slide tray rim.



5. With a colored felt tipped pen draw a line on the tops of all the slides around the slide tray. This line aids in visually checking to assure that all slides are in proper order.

6. Type the retrieval number and title on a label.

   Example:

   WE
   559
   SL
   No. 1
   1971
   MUSCULAR
   DYSTROPHY

7. Tape the label on the Kodak Carousel box with wide library tape. This tape, besides holding the label in place, also keeps the label clean.

8. Label library pocket with title and retrieval number.

   Example:

   WE
   559
   SL
   No.1
   1971
   MUSCULAR
   DYSTROPHY

Accompanying materials

1. Label audiocassette, typescript, or accompanying material with the retrieval number.

Format: Videocassettes

1. Type the retrieval number and title on two labels.

   Example:

   WJ
   300
   VT 3/4
   No. 89
   1976
   ACUTE RENAL
   FAILURE

2. Place one label on the spine of the videocassette box and cover with wide library tape.

3. Place the second label directly on the videocassette. Avoid covering any cataloging information.

Format: 16 mm. Films

1. Type label with title and retrieval number.

   Example: WE 350 MP16 No. 1 1971 GOUT

2. Place label on the edge of the 16 mm. film container.

3. Put clear library tape over the label.

Format: Audiocassettes

1. Type two labels with title and retrieval number.

2. Place one label on the audiocassette and the one on the audiocassette container.

SOURCES OF LABELS

Adhesive Label Company
2450 Louisiana Avenue N.
Golden Valley, Minnesota 55427

Arvey Sales Company
P. O. Box 5808
Sarasota, Florida 33579

Comprehensive Service Corporation
P. O. Box 1488
Madison, Wisconsin 53701

Demco Educational Corporation
P. O. Box 1488
Madison, Wisconsin 53701

Highsmith Company, Inc.
P. O. Box 25, Highway 106 East
Fort Atkinson, Wisconsin 53538

Meyers Printing Company
500 South Third Street
Minneapolis, Minnesota 55414

Shelving Audiovisuals

The question of how to arrange audiovisual items on the shelf is often raised. There are advantages and disadvantages to each possibility. The following summarizes several different shelving arrangements, listing advantages and disadvantages of each. Before choosing any particular shelving arrangement, it is best to create lists similar to the following, noting additional positive and negative considerations.

Possible alternatives for shelving audiovisuals

I. Interfiling media with books.

II. Clustering media by subject and format, with media immediately following a book subject area.

III. Clustering media by subject and format in a separate area.

IV. Clustering media by format and accession number in a separate area.

Each of the four possible shelving arrangements will be studied in terms of the following considerations:

A. Accessibility

B. Durability

C. Shelf Space

D. Packaging

E. Retrieval Numbering

F. Equipment

G. Personnel

I. Interfiling media with books

Advantages

A. Arrangement I allows an easy subject approach to materials. All books and media on a particular subject are shelved together.

Disadvantages

B. Interfiling media and books can be wearing on the materials. Shelving odd-shaped containers next to books causes containers to wear out much faster than shelving like containers together.

C. Interfiling media with books requires a much larger shelving area than filing each format separately. This is an important consideration in a situation with limited space.

D. Arrangement I is expensive in packaging supplies. All media must be stored in heavy duty containers so that they may be placed on the shelves with the books.

E. Arrangement I requires a time consuming retrieval numbering system. Instead of just an accession number, a NLM classification number must be assigned to shelve the media with the books on the same subject.

Additional Considerations

F. Depending upon the size of the learning resources center, there may be a need for greater quantities of equipment. In Arrangement I, the media are dispersed throughout the collection and it is preferable to have equipment available near all areas in which media are located.

G. In Arrangement I, where media and books are interfiled, there may be a need for:

(1) more media personnel than would be necessary if dealing with separate book and media areas because media are dispersed throughout a large physical area.

(2) all personnel to become skilled in media management.

II. Clustering media, on a like subject and format, with media immediately following a book subject area.

Advantages

A. Arrangement II allows an easy subject approach to materials.

B. Clustering media by format is less wearing on the media than interfiling them with books. In Arrangement II, all like containers are together on the shelf and consequently there is less wear on the media.

Disadvantages

E. Arrangement II requires a time consuming retrieval numbering system. A NLM classification number, rather than just an accession number, must be assigned to shelve the media immediately following the books on the same subject.

Additional Considerations

C. Arrangement II requires less shelf space than interfiling media with books, but more shelf space than Arrangements III and IV.

D. The heavy duty containers necessary for interfiling media and books may not be required for Arrangement II.

F. In some learning resources centers, there may be a need for additional equipment to serve the media dispersed throughout the collection.

G. Similar to interfiling media and books, Arrangement II may require additional and/or more highly skilled personnel to accomodate the media users in all parts of the learning resources center.

III. Clustering media by subject and format in a separate area.

Advantages

B. Clustering media by subject and format in a separate area is not as wearing on the materials as interfiling books and media on the shelf.

C. Arrangement III requires minimal shelf space and does not distract from the book stacks as do both Arrangements I and II.

Disadvantages

A. Arrangement III does not allow for the very convenient subject approach found in Arrangements I and II. In Arrangement III, the patron must search for the books on a particular subject in the book stacks and then search for the media on the same subject in a separate stack area.

E. Arrangement III requires a time consuming retrieval numbering system. A NLM classification number, rather than just an accession number must be assigned to shelve like subject materials together.

Additional Considerations

D. The heavy duty containers necessary for interfiling media and books may not be required for Arrangement III.

F. In Arrangement III, where all media are housed in a separate area, there may be a need for less equipment than required in both Arrangements I and II.

G. In Arrangement III, where all media are housed in a separate area, there may be:

(1) fewer media personnel needed than would be necessary if dealing with an interfiled collection of books and media because the media area would be physically smaller than Arrangements I and II.

(2) no need for all personnel to have media management skills, although personnel in the media area must have some level of technical expertise.

IV. Clustering media by format and accession number in a separate area.

Advantages

B. Clustering media by format and accession number in a separate area is not as wearing on the material as interfiling media and books.

C. Arrangement IV requires minimal shelf space and does not distract from the book stacks as do both Arrangements I and II.

E. Arrangement IV does not require a time consuming retrieval numbering system. An accession, rather than a NLM classification number, is assigned to the material.

Disadvantages

A. In Arrangement IV the only subject approach to the media is through the catalog. The materials on a similar subject are not shelved together, therefore there is no browsing ability.

Additional Considerations

D. The heavy duty containers necessary for interfiling media and books may not be required for Arrangement IV.

F. Arrangement IV, similar to Arrangement III, may require less equipment than necessary in both arrangements I and II where the media are dispersed throughout the collection.

G. As in Arrangement III, Arrangement IV may require fewer media personnel than Arrangements I and II. Again, not <u>all</u> personnel need media management skills.

Recommendation for Selection and Maintenance[1]

General considerations

When a new piece of equipment is introduced to the learning resources center, a card should be added to the equipment file which contains the following data:

- Name of equipment with brand and model designed
- Serial number of equipment
- Date of purchase
- Source of purchase
- Date warranty filed
- Institutional property number assigned to equipment

Warranty periods must be recorded and a file kept. Be sure to note if there are specific maintenance instructions provided in the user's manual accompanying a piece of equipment.

A maintenance record should be kept for each hardware item. This record provides a continuous check on the equipment, location, age, manufacturer, purchase source, condition, repair history and, if possible, the amount of use being made of it. The repair history is made up of all repairs and routine maintenance done, by whom, at what cost, and the labor and parts involved in the repairs.

Equipment scheduling

1. Some audio and visual equipment must be kept permanently in the

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[1]Adapted from: Bogan, Betty, Op. Cit. p. 78-87.

institution to support the services of the learning resources center. Indiscriminate lending hurts center users and augments overall maintenance problems.

2. Some equipment may be permanently assigned to classrooms, departments and other institutional facilities. The administration should be consulted in developing policies regarding loan of audiovisual equipment outside of the institution.

3. If your responsibility becomes circulation of institutional equipment, be certain that technician maintenance support accompanies the mandate. Malfunctioning equipment is the surest road to disuse of an audiovisual facility.

4. To avoid confusion and overbooking of equipment for temporary use, scheduling procedures must be maintained.

5. Requests to borrow equipment should be filed by due dates. It may be helpful to have printed numbers on similar types of equipment, so that, for example, tape player number 3 is noted as checked out. Spare bulbs should always accompany loaned equipment.

General selection considerations

In summary, equipment selection involves evaluation based on:

1. Compatibility with software and existing hardware
2. Usefulness
3. Ease of operation
4. Reliability
5. Sturdiness
6. Portability
7. Safety
8. Repairability
9. Warranty
10. Competitive pricing

SELECTION AND MAINTENANCE BY SPECIFIC FORMAT

16 mm. Films

Film stock consists of a base, an emulsion and a binder.

The sound track is usually optical rather than magnetic. This means the sound track cannot be erased. Most projectors allow for changing speed from silent to sound speed and vice versa. Silent film will have sprocket holes on both edges.

Basically all sound motion picture projectors are a combination of three mechanical devices, each of which performs one of the functions which together constitute the modern projector.

1. A mechanism for passing light through a series of rapidly changing still photographs recorded on film. To do this the projector must move the film in front of a strong light source, and it must mechanically start and stop this film 24 times per second in front of this light.

2. A mechanism for moving the sound-track portion of the film between a constant light source and a photoelectric cell in order to reproduce sound. The film must move at a constant speed so as to produce lifelike sound.

3. An amplification unit much like a small radio set which will amplify tiny sound impulses that allow the listener to hear lifelike voices and sounds.

Projector selection

1. Check for simplicity of loading:
   a. Manual threading permits the operator to match the film to a path printed on the side of the projector.
   b. Manual threading permits the operator to press a single lever to remove film from the track, whereas, an automatic projector needs a little more maneuvering to extract the film from inside the projector.
   c. An automatic threading projector is easier to set up and use, but can severely damage film if not in proper adjustment or correctly operated.
2. Check for portability: Can the operator lift it easily? Is it easy to move from one room to another?
3. Ask for a demonstration of sound and picture quality.
4. Durability: Ask for specifications and endurance test results.
5. Film handling:
   a. See if the film carrying mechanism is gentle on the film: are there built-in shock absorbers to cushion the film through a simple threading process?
   b. See if the sprockets gnaw at the film; the pull down claw should be made of a material which minimizes wear of film and sprocket holes.
   c. See if there is excessive film "chatter" as the film passes through the shutter gate.

6. Do you need a still frame for keeping one frame on the screen for a time?
7. Is there accomodation for both sound and silent films?
8. Guarantees: Ask for the length of the warranty period; what the warranty covers, what it doesn't cover.
9. Local service must be available.
10. Auxiliary equipment:
    a. Do you need an external speaker for large audience listening?
    b. How expensive and valuable are different lenses for different screen/room sizes? Is there a zoom lens that can accomodate most situations?
    c. Do you need a remote control?
    d. Do you need headphones?

Projector maintenance

1. Cleaning of the projector can and should be done at the learning resources center if technical skill is available. If such capabilities are not available among the staff of the learning resource center, provision must be made for contract maintenance through a local dealer.
2. Too much oil on a projector can cause damage as quickly as no oil at all. Oiling should be done by a trained technician in accordance with the maintenance instructions included with the film projector.

Film maintenance

1. Splicing of film can be done easily and without messy supplies by a Kodak Presstape Universal Splicer.
2. A long leader attached to the beginning of all films is worth saving the agony of chewed-up film which most generally occurs when the film is first projected. Also, the greatest tension on the film is on projection start-up.
3. Badly torn sprocket holes need to be sent to a film lab to replace.
4. Cleaning of films needs to be done professionally at least once a year, although experts suggest after every five showings.
5. Replacement footage can usually be purchased rather than entire film replacement purchase from the film distributor.
6. Films should not be stored near heating pipes or in the line of sunlight coming through a window, regardless of whether the room is cool or not.
7. Damaged reels can harm film and need to be replaced.
8. The size of the take-up reel should be the same or larger than the supply reel.

35 mm. (2x2 in.) Slides

A slide is a relatively small piece of film, usually 35 mm., or other transparent material on which a single pictoral or graphic image has been placed.

The usual format is 2x2 inches but 3½x4 inch lantern slides are used by some for projection on very large screens or when extremely fine detail is required.

Projector selection

1. Is the machine reliable, quiet, and relatively jam proof?
2. How well does it handle slides in different mounts?
3. Is the machine easy to operate; is it easy to operate in the dark?
4. Is a filmstrip adapter unit available for this machine?
5. Is the machine compact, portable and easy to maintain?
6. Is the lamp output sufficient to provide a bright, clear picture?
7. Do you need a unit that will take an inaudible cue from a tape?
8. Do you need a unit which will automatically advance your slides at given intervals, say every 15 seconds?
9. Auxiliary equipment
   a. Do you need multiple lenses or a zoom lens?
   b. What kind of slide storage is compatible with this machine; can you easily show large groups of slides as well as a few slides?
   c. Do you need a slide/tape capability in one unit?

10. Most projectors for slides have filmstrip adapter units which can be purchased as an accessory item.
11. The lenses used in the projector depend on the size of the screen.

Projector maintenance

1. The intensity of the light determines the brillance of the projected picture on the screen and hence, the degree of darkness necessary for effective projection. Light intensity is determined primarily by the power of the projection lamp and the quality of the lens system. Nothing less than a 500-watt capacity projector should be considered for group viewing. This amount of power is needed to project a picture that is of sufficient size, brilliance and color quality.
2. Heat is the enemy of all film. All projectors suitable for institutional use are cooled by an electric fan or blower system. A low light projection level should be used for more extended viewing. The Kodak Ektagraphic projector has two light intensity controls for this purpose.
3. Projectors should be cleaned frequently to remove dust from all areas, and finger prints and dust from all lense surfaces.

Slide maintenance

1. Slides may be mounted in cardboard, plastic or glass. Cardboard mounts tend to fray and need metal or plastic sleeves for protection. They also tend to absorb and hold moisture. If glass mounted slides are used in high-intensity light projectors, the lamp heat may blister the film emulsion.

2. Super-capacity trays like the Kodak Carousel 140 capacity trays may jam when slides warp or fray slightly at the corners. Glass mounts will not fit in these trays.
3. The life expectancy of a slide is almost six years. The life expectancy of a projector is ten years.
4. There are a wide variety of slide storage devices. Plastic sheets or frames filled with slides can be placed in notebooks or filed in storage cabinets. Cardboard, plastic or metal slide boxes can store sets of slides. Trays, of varying sizes, can store slides which are ready to place on projection equipment. The most widely used storage device in the health field is the Kodak carousel tray since Kodak projectors have proven to be durable and flexible items. The bulkiness of storing the trays versus a more compact unit must be weighed against dirt, dust, and finger-prints when slides need to be rearranged for the projection equipment.
5. Slides may be cleaned with a commerical film cleaning fluid lightly applied to a dirt free cleaning cloth.

35 mm. Filmstrips

A filmstrip is a series of still pictures on a strip of film (usually 35 mm.).

A filmstrip projector is like a horizontal slide projector except that it has a film mechanism instead of a slide carrier.

Projector selection

1. Can you easily adapt a slide projector instead of purchasing another machine?
2. Do you need a portable unit that has an audiocassette player built-in for sound filmstrip presentation?
3. Do you need a synchronizer unit so that the filmstrip will automatically advance at a signal on the audiocassette? Beware! Audiocassette inaudible signals differ in frequency; you need to know whether the automatic advance mechanism is compatible with the frequency of the signal used on your tape program.

Projector maintenance

1. Dirt and dust accumulate in the aperture from which the image is projected. Dust can be blown from this aperture.
2. Lens should be cleaned with lens paper.
3. Machines should be left on the "fan" position after use before being moved, as heat wears machine parts. Blocking fans or insufficient ventilation will cause machine damage.

Filmstrip maintenance

1. Filmstrips come in their own containers which provide compact storage and protection from dust.
2. Filmstrips should never be cinched to tighten the roll to fit in the container as this produces scratches.
3. They should be only handled along the edges as fingerprints leave smudges. To remove fingerprints and fungus, use a film cleaner designed specially for that purpose. Some film cleaners remove the protective lacquer which some processors apply to films. One good film cleaner product is Kodak Film Cleaner. This process applies to all films as well as filmstrips.

Projection screens selection and maintenance

1. There is little maintenance required on fixed screens.
2. Portable screens should be checked to see that mechanical parts are tight and operating properly.
3. Rips in the fabric need special equipment and materials available from audiovisual suppliers.
4. Mat surfaces can be washed; beaded surfaces should only be brushed with a soft brush.
5. Only soft-tipped pointers should be used.
6. Plastic screens of rear screen devices need to be cleaned to remove dust and finger prints.

Characteristics of magnetic recording tape

Magnetic recording tape consists of a base, a binder and iron oxide powder. The base holds the iron oxide powder and electricity, insulating one layer of iron oxide from the other to prevent print-through when the tape is wound on a reel.

The base can be either acetate or polyester (mylar). Both acetate and polyester can be used for audiotape, but only polyester can be used for videotape because of the strength, long-life, and relative stability required for videotape.

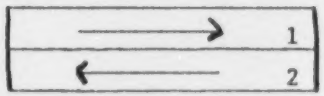
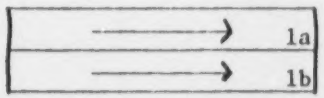
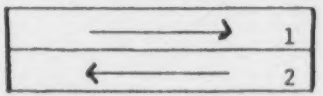
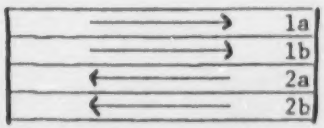
The binder provides an efficient bond of the iron oxide to the base and confines the minute particles of the oxide within a thin layer.

Iron oxide, the key component of magnetic oxide, is ferric oxide in fine cigar-shaped particles approximately 0.1 micron thick and 0.7 microns long. (A micron is 1/1000 millimeters). These particles are suspended in the binder in much the same way as almonds are held in a chocolate bar.

See page 103 for a helpful chart on magnet recording tape.

CHARACTERISTICS OF AUDIO TAPE RECORDING FORMATS

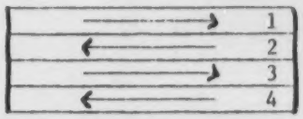
	REEL TO REEL FORMAT	CASSETTE FORMAT
Physical Appearance		
Definition	A single open reel on which tape is wound. The tape machine must be threaded and an external take-up reel is required.	A supply reel, containing tape, and a take-up reel sealed within a plastic housing. A cassette is a self-contained unit and therefore threading is eliminated.
Size of Container	Tape reel may be 1½", 3", 5", or 7" in diameter.	All cassettes are the same size. (Approximately 4" x 2½" x ½")
Width of Tape	Reel tape is ¼" wide	Cassette tape is 1/8" wide
Record/Playback Speed	1-7/8 ips - used for voice 3-3/4 ips - used for voice and music 7-1/2 ips - used for music (ips = inches per second)	Standardized at 1-7/8 ips (ips = inches per second)
Number of Recording Tracks Available	2 track - called half track or dual track 4 track - called quarter or four track	2 track - called half track or dual track 4 track - called quarter or four track
Possible Modes	Mono, Stereo, and Quadraphonic	Mono and stereo. (Mono is most common for instructional uses.)
Primary Uses	Reel to reel format is used for high quality music recording and for producing original master tapes.	Cassette format is used for inexpensive and portable recording applications.
Length of Tape	Using the 1.5 mil thickness of tape, a 3" reel holds 300 feet of tape a 5" reel holds 600 feet of tape a 7" reel holds 1200 feet of tape.	Specified in terms of minutes (See Record/Play Time)

	REEL TO REEL FORMAT	CASSETTE FORMAT
Record/Play Time	Time depends on tape width, tape speed and reel size. For example: 1.5 mil tape at 1-7/8 ips, on a 5" reel = 1 hr. per side 1.5 mil tape at 1-7/8 ips, on a 7" reel = 2 hr. per side 1.5 mil tape at 3-3/4 ips, on a 5" reel = 30 min. per side 1.5 mil tape at 3-3/4 ips, on a 7" reel = 1 hr. per side 1.5 mil tape at 7-1/2 ips, on a 5" reel = 15 min. per side 1.5 mil tape at 7-1/2 ips, on a 7" reel = 30 min. per side (Note: 1.5 mil thickness is common for school use. Reel tape is also available in thicknesses of 1.0 mil, .75 mil and .50 mil. The thinner the tape, the more likely it will stretch or break. (Mil = 1/1000 inch.)	Time is determined by cassette model. Model C-15 - 7½ min. per side - 15 min. total Model C-30 -15 min. per side -- 30 min. total Model C-60 -30 min. per side -- 60 min. total Model C-90 -45 min. per side -- 90 min. total Model C-120-60 min. per side - 120 min. total Note: Cassettes can be used repeatedly, but if you record and break the back recording pins, you can only play repeatedly. You cannot record again.
Record/Playback Track Arrangements	Half or Dual Track MONO  Records on upper half (1) of tape only. After the upper half is recorded, the reel can be turned over in order to record on the bottom half (2) of the tape. Half or Dual Track STEREO  Records on both upper half (1a) and lower half (1b) of tape simultaneously. (Tape cannot be turned over.)	Half or Dual Track MONO  Records on upper half (1) of tape only. After the upper half is recorded, the cassette can be turned over in order to record on the bottom half (2) of the tape. Quarter Track STEREO  Records on upper two fourths (1a and 1b) simultaneously. Cassette can be turned over in order to record on the bottom two fourths (2a and 2b) simultaneously. The recording arrangement allows stereo tapes to be played on mono machines.

	REEL TO REEL FORMAT	CASSETTE FORMAT

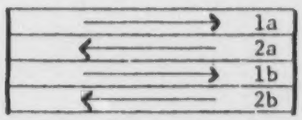
Record/Playback Track Arrangements (Continued)

Quarter or Four Track MONO



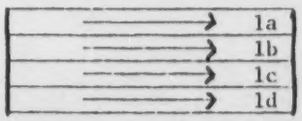
Records on upper fourth (1) of tape only. Then on below middle fourth (3) only. Reel can be turned over in order to record on the above middle fourth (2) only and the bottom fourth (4) only.

Quarter Track STEREO



Records on upper fourth (1a) and below middle fourth (1b) simultaneously. Reel can then be turned over in order to record on the above middle fourth (2a) and the bottom fourth (2b) simultaneously.

Four Track QUADRAFONIC



Records on all four fourths (1a), (1b), (1c), (1d), simultaneously. (Reel cannot be turned over.)

Courtesy of Dr. James Duane,
School of Education,
University of Utah

Player selection

1. Do you need a reel-to-reel and/or an audiocassette unit?
2. Do you need to be able to dub from one format to the other? Do you need two machines of the same format so you can duplicate programs? Only high speed duplicators duplicate faster than regular playback speed.
3. You need a good amplifier and good speakers of institutional quality.
4. Check for sturdy roller bearings, "lifetime" lubrication, and precision bonding of all parts.
5. Do you need a unit which will program or give you an inaudible cue on the tape? Is this program signal compatible with the slide and/or filmstrip projector you have or are considering?
6. Do you need a varible speed mechanism to provide for listening to audiocassettes faster than originally recorded?

Player maintenance

1. The life expectancy of the tape recorders is five years.
2. The erase and record/play heads collect a good deal of dust and dirt from the environment. Heads should be cleared every few months. The player should be covered when not in use.
3. The heads may accumulate magnetism which will result in increased background noise on tapes. Special head demagnetizers are available from audiovisual suppliers. Care should be taken not to actually touch metal demagnetizers to polished metal heads.

4. The entire tape path from supply reel to take-up reel should be inspected. The rubber rollers can be cleaned with a piece of cloth moistened in alcohol.
5. Pieces of tape lodged in the machine need to be removed with wood or plastic tools.
6. Heads should be cleaned and lubricated every few months. The entire tape path should be lubricated, with the exception of the capstan, pressure pads and rollers (which are not metal).

Audiotape maintenance

1. Acetate tape will break and polyester tape will stretch if put under great tension. Tapes do not wear out; they are damaged by improper handling and storage.
2. Because of the magnetic properties of tape, a storage area should be chosen away from any stray magnetic fields, such as a steady field of direct current, a permanent magnet or a concentrated field of alternating current. Faulty wiring in machines can cause tape damage as can power shorts or blackouts in the power supply to the equipment.
3. Print-through of sound from one side of a tape to another can be minimized by rerunning tapes in real time or at high speed once a year.
4. The length of the tape determines the running time. In the case of audiocassettes, the casings are all the same size. Therefore, the longer the running time, the thinner the tape and the more susceptible it is to breakage. In choosing a speed for the reel-to-reel tape, a slower speed will provide economy in utilization of tape, but the faster speed setting provides improved sound quality.

5. To avoid unwanted erasure of cassette programs, the two tabs on the side of the cassette must be punched out.
6. For splicing of magnetic tape, only pressure sensitive tape made for that particular purpose should be used. Regular cellulose tape causes the splices to come apart in a year or two.

3/4 In. Videotape Cassette

Player selection

1. Is compatibility with other video systems in your audiovisual network a concern?
2. What kind of track record does the machine have at other institutions?
3. Can you readily get maintenance on the videocassette player?
4. Do you need a pause control mechanism to allow instantaneous start-up from the point at which the user stops the program?
5. Do you need a player/recorder in order to duplicate programs from another videocassette player?
6. Do you need a tab control which allows the program to rewind or fast forward to a section "tabbed" for the machine to automatically stop when it reaches that point in the program?

Player maintenance

1. Because of the highly specialized nature of this machine, trained technicians must be available for proper maintenance.
2. The heads can be cleaned at the learning resources center but instruction should be sought from videocassette maintenance personnel.
3. Proper user orientation is imperative for good functioning equipment.

Videotape maintenance

1. Videotape is a stronger, more durable version of audiotape.
2. Just as in an audiocassette, the videotape cassette contains both the supply and take up reel in one package.
3. The hub is the strongest and most stable part of the reel. Cassettes and tapes should be handled by the hub. In a cassette care should be given not to touch the metal strip on the side where the tape feeds into the machine.
4. While the life expectancy of a videocassette is said to be 1,000 plays, recent reports indicate a shorter life. Alan Evans of Ohio State indicates that with many stops and starts and heavy tape use, cassette life may be as low as 250 plays.
5. Videocassettes are subject to edge damage, wrinkling and getting snagged in the player. Fuzzy pictures may be the result of dirty playing heads over which the tape passes. Dirty heads lessen the life expectancy of tapes.
6. Chewed tape needs to be professionally spliced. A badly damaged tape needs to be replaced but discounts for replacement copies are usually available.
7. Videocassettes should be played in real time at least once a year to relieve internal pressures that can build up in the videocassette.

A CHECKLIST FOR THE SELECTION OF AUDIOVISIUAL EQUIPMENT FOR INDIVIDUAL AND SMALL GROUP PRESENTATION*

by Harry Marchant

Equipment by itself cannot teach, its use being only a means to an end. One has to attempt to make an evaluative assessment of equipment with regard to its effectiveness in a given learning situation.

The following checklist was compiled as an aid to the selection of audiovisual equipment. Ideally, too many "no" answers should be avoided, although some compromise may be inevitable.

EQUIPMENT SELECTION CHECKLIST	YES	NO
Section A. Fundamental Question		
1. Have precise learning objectives been defined?		
2. Have the tasks required of the equipment been identified?		
3. Will the use of an audiovisual medium justify the costs and preparation time involved?		
4. Could the equipment be operational in the time limits laid down?		
5. Has adequate space for a) operating the equipment, and b) the storage of associated software been provided for?		
(Principle: Task parameters first/media selection after.)		
Section B. Equipment Factors		
1. Costs		
a) Can the equipment be bought or hired at an economical price relative to the importance of the topic to be learned?		
b) Has allowance been made for sufficient equipment? (A number of learning stations may be set up and discounts may be available on quantity purchases.)		
c) Has any ancillary equipment or modifications that may be required been included in the budget?		
d) Will the equipment have a reasonable working life before becoming obsolete?		
2. Mechanical efficiency and servicing		
a) Will the performance of the equipment be maintained under normal working conditions? (Reliability factor.)		
b) Is it capable of being easily maintained? (Find out if first line servicing can be carried out by the user.)		
c) Are spare parts readily available?		
d) Is a servicing agreement available? (Find out if the firm's reputation in this area is a good one.)		

*Reprinted from: Bogan, Betty. Ibid. pp. 94-96

	YES	NO
3. Picture features (Answers in this part will depend on whether a still or moving image system is being selected.) a) Is the picture size adequate for the users? b) Can different picture areas be accommodated? c) Are there facilities for: -still frame? -slow motion forward and reverse? -immediate repeat? d) Can pictures be located quickly and precisely? e) Can the pictures be clearly seen under ambient lighting conditions? (Note: If there are facilities for recording pictures, find out what security there is against erasure.)		
4. Sound features a) Is the quality of the sound adequate? b) Is there provision for: -an external speaker? -headsets? c) Can the soundtrack be located quickly and precisely? (Note: If there are facilities for recording sound, find out a) if there is any provision for input from sources other than the microphone; b) what types of connections are used; and c) what security there is against accidental erasure.)		
5. Operating factors a) Is the equipment portable? If so, can it be quickly set up in another area if required? b) How much space is required to operate the equipment properly? c) Are the controls clearly marked? d) Can the operator: -easily load the software? -control the rate of information flow? (operation of stop/start controls) -control the focussing? e) Are there facilities for automatic rewind of material? (Find out if these operations can be easily accomplished.) f) Is the equipment: -electrically safe? (Find out if there is any provision for a mains isolating switch.) -for all practical purposes student-proof?		
Section C. Software		
1. Are there already available suitable programs? (Find out if these are available for rental or purchase, and the costs involved.)		
2. Can programs be easily and cheaply produced by the customer? (Determine if any additional equipment will be required.)		

	YES	NO
3. If programs have to be specially produced, are commercial units available to do this? (Find out what it will cost and how quickly production can be done.)		
4. Can sufficient playbacks be obtained from the software without noticeable deterioration?		
5. Can the programs be easily updated? (Find out if the software is easily accessible for cleaning, editing, and joining breaks.)		
6. Can the programs be easily handled and stored? (Find out what environmental conditions are likely to affect storage.)		
Section D. Compatibility		
1. Is the software compatible with material used on machines made by other manufacturers?		
2. Can the software be taken out of a cartridge and used in cartridges designed by other manufacturers? (Note: Videotape and film variables include running speeds, scanning systems, formats, and magnetic/optical sound.)		

Note: Reprinted with permission from Audiovisual Instruction.

SOURCES OF AUDIOVISUAL SOFTWARE IN THE HEALTH SCIENCES

ACS/Clinitapes
55 East Erie Street
Chicago, Ill. 60611
(312) 664-4050

A-V Corporation
2518 North Boulevard
Houston, Tex. 77098
(713) 523-6701

A-V Scientific Aids, Inc.
639 North Fairfax Avenue
Los Angeles, Calif. 90036
(213) 658-6911

Abbott Laboratories
Abbott Park
North Chicago, Ill. 60064
(312) 688-6100 (Main #)
Ext. 3933 (Film Library)

University of Alabama
School of Dentistry
University Station
Birmingham, Ala. 35294
(205) -934-4011

Albany Medical College
Department of Postgraduate Medicine
Albany, N.Y. 12208

Aldine Publishing Company
529 South Wabash
Chicago, Ill. 60605
(312) 939-5190

American Academy of Family Physicians
1740 West 92nd Street
Kansas City, Mo. 64114

American Academy of Ophthalmology and Otolaryngology
15 Second Street, S.W.
Rochester, Minn. 55901
(507) 288-7444

American Academy of Orthopedic Surgeons
430 North Michigan Avenue
Chicago, Ill. 60611
(312) 822-0970

American Academy of Pediatrics
Department of Communications
1801 Hinman Avenue
Evanston, Ill. 60204
(312) 869-4255

American Academy of Psychotherapists
Tape Library
1040 Woodcock Road
Orlando, Fla. 32803

American Association for the Advancement of Science
1515 Massachusetts, N.W.
Washington, D.C. 20005

American Association of Blood Banks
1828 "L" Street, N.W.
Washington, D.C. 20036
(202) 872-8333

American Association of Endodontists
P. O. Box 11728
Northside Station
Atlanta, Ga. 30324
(404) 237-5164

American Association of Orthodontists
7477 Delmar Boulevard
St. Louis, Mo. 63130
(314) 726-5616

American Cancer Society
777 3rd Avenue
New York, N.Y. 10017
(212) 371-2900

American College of Cardiology (ACCEL)
9650 Rockville Pike
Bethesda, Md. 20014
(301) 530-1600

American College of Chest Physicians
P. O. Box 93884
Chicago, Ill. 60670
(312) 698-2200

American College of Hospital Administrators
Education Department
840 North Lake Shore Drive
Chicago, Ill. 60611
(312) 943-0544

American College of Obstetricians and Gynecologists
One East Wacker Drive
Room 2700
Chicago, Ill. 60601
(312) 222-1600

American College of Physicians
4200 Pine Street
Philadelphia, Pa. 19104
(215) 243-1200

American College of Radiology
20 North Wacker Drive
Chicago, Ill. 60606
(312) 236-4963

American College of Surgeons
Surgical Film Library
Davis and Geck, Distributor
1 Casper Street
Danbury, Conn. 06810
(203) 743-4451

American Dental Association
Bureau of Audiovisual Services
211 East Chicago Avenue
Chicago, Ill. 60611
(312) 944-6730 Ext. 277

American Dietetic Association
620 North Michigan Avenue
Chicago, Ill. 60611

American Heart Association
7320 Greenville Avenue
Dallas, Tex. 75231
(214) 750-5300

American Hospital Association
Film Library
840 North Lake Shore Drive
Chicago, Ill. 60611
(312) 645-9400

American Journal of Nursing Company
Educational Services Division
10 Columbus Circle
New York, N.Y. 10019
(212) 582-8820

American Lung Association
1740 Broadway
New York, N.Y. 10019
(212) 245-8000

American Medical Association
c/o Association Sterling Films
See Association Sterling Films' regional addresses

American National Red Cross
National Headquarters
17th and D Street, N. W.
Washington, D. C. 20006
(202) 737-8300

American Optometric Association
Optometric Development Enterprises
7000 Chippewa Street
St. Louis, Mo. 63119
(314) 832-5770

American Physiological Society
9650 Rockville Pike
Bethesda, Md. 20014
(301) 530-7164

American Podiatry Association
Audiovisual Section
20 Chevy Chase Circle, N.W.
Washington, D.C. 20015
(301) 362-2700

American Psychiatric Association
Distributor: APA/H and CPS Film Library
Visual Aids Service
University of Illinois
Champaign, Ill. 61820
(217) 333-1361

American Rehabilitation Foundation
Sister Kenny Institute
Minneapolis, Minn. 55404
(612) 871-7331

American Society for Microbiology
1913 "I" Street, N.W.
Washington, D.C. 20006
(301) 833-9680

American Society of Clinical Pathologists
2100 West Harrison Street
Chicago, Ill. 60612
(312) 738-1336

American Society of Hematology
National Slide Bank
HSLRC T-252 SB56
University of Washington
Seattle, Wash. 98195
(206) 543-0050

American Society of Hospital Pharmacists
4630 Montgomery Avenue
Washington, D.C. 20014
(301) 657-3000

Ames Company
1127 Myrtle
Elkhart, Ind. 46514
(219) 264-8111

Appalshop, Inc.
Box 743
Whitesburg, Ky. 41858
(606) 633-5708

University of Arkansas
School of Medicine
4301 Markham Street
Little Rock, Ark. 72201
(501) 664-5000 Ext. 196

Armed Forces Institute of Pathology
Audio-Visual Support Center
Washington, D. C. 20306
(202) 576-2864

Armed Forces Institute of Pathology
Television Section
Room 1077
Washington, D. C. 20306
(301) 576-2878

Arthritis Society
45 Charles Street, E.
Toronto, Ontario, Canada
M4Y 1S3

Association Sterling Films
Regional Film Centers

6644 Sierra Lane
Dublin, Calif. 94566
(415) 829-2300

7838 San Fernando Road
Sun Valley, Calif. 91352
(213) 767-7400

5797 New Peachtree Road
Atlanta, Ga. 30340
(404) 458-6251

512 Burlington Avenue
La Grange, Ill. 60525
(312) 352-3377

410 Great Road
Littleton, Mass. 01460
(617) 486-3518

6420 W. Lake Street
Minneapolis, Minn. 55426
(612) 920-2095

600 Grand Avenue
Ridgefield, N.J. 07657
(201) 943-8200

866 Third Avenue
New York, N.Y. 10022
(202) 935-4210

915 N. W. 19 Avenue
Portland, Ore. 97209
(503) 226-7695

324 Delaware Avenue
Oakmont, Pa. 15139
(412) 362-5011 (Pittsburgh only)
(412) 828-5900

8615 Directors Row
Dallas, Tex. 75247
(214) 638-6791

Astra Pharmaceutical Products, Inc.
Audiovisual Communication
Neponset Street
Worcester, Mass. 01606
(617) 852-6351

Au-Vid, Inc.
P. O. Box 964
Garden Grove, Calif. 92642
(714) 636-1682

Audio-Digest Foundation
1250 South Glendale Avenue
Glendale, Calif. 91205
(213) 245-5597

Audiscan Incorporated
P.O. Box 1456
1414 130th N.E.
Bellevue, Wash. 98009
(206) 456-0694

Audiovisual Education in Neurosurgery (AVENS)
15 Columbus Circle
New York, N.Y. 10023
(212) 541-8080

Ayerest Laboratories
Medical Information Service
685 Third Avenue
New York, N.Y. 10017
(212) 986-1000

BMA and BLAT Film Library
Department of Audiovisual Communication
British Medical Association
B. M. A. House, Tavistock
London, WC1H, 9JP
England

Bandelier Films, Inc.
2001 Gold Avenue, S. E.
Albuquerque, N. M. 87106
(505) 242-2679

Bandera Enterprises
P. O. Box 1107
Studio City, Calif. 91604
(213) 985-5050

Bausch and Lomb Optical Company
Department 6606
1400 North Goodman Street
Rochester, N.Y. 14602
(716) 338-6000

Baxter Laboratories, Inc.
Medical Film Library
6301 Lincoln Avenue
Morton Grove, Ill. 60053
(312) 945-8500

Baxter-Travenol Laboratories
Division of Artificial Organs
1 Baster Parkway
Deerfield, Ill. 60015
(312) 948-2054

Bay State Films Productions
35 Springfield Street
Aguwam, Mass. 01001
(413) 786-4454

Baylor College of Dentistry
800 Hall Street
Dallas, Tex. 75226
(214) 824-6321

Baylor College of Medicine
Department of Physical Medicine
1333 Moursand Avenue
Houston, Tex. 77025
(713) 526-4281

Baylor College of Medicine
Learning Resources Center
1200 Moursand Avenue
Houston, Tex. 77025
(713) 790-4716

Beckman Instruments, Inc.
2500 Harbor Boulevard
Fullerton, Calif. 92634
(714) 556-8560

Big Sur Recordings
2015 Bridgeway
Sausalito Calif. 94965
(415) 332-5960

Billy Burke Productions
535 South Curson Avenue, West
Los Angeles, Calif. 90036
(213) 938-4133

Blue Hill Educational Systems, Inc.
120 East 52nd Street
New York, N.Y. 10022
(212) 679-2467

Boston University
Sargent College of Allied Health Profession
Instructional Resource Center
University Road
Boston, Mass. 02215
(617) 353-4201

Boston University Medical Center
Alumni Memorial Library
80 East Concord Street
Boston, Mass. 02118
(617) 247-6187

Boyce Productions
101 Casa Buena Drive
Suite "B"
Corte Madera, Calif. 94925
(415) 924-7331

Brandon Films, Inc.
c/o McMillan Films
34 Macquesten Parkway, South
Mt. Vernon, N.Y. 10550
(914) 664-5051

Brookdale Dental Center
Department of Periodontics
421 First Avenue
New York, N.Y. 10010
(212) 598-7037

Burroughs Wellcome Company
Hospital Services Department
3030 Cornwallis Road
Research Triangle Park, N.C. 27709
(919) 549-8371

CBS Consumer Publication
600 3rd Avenue
New York, N.Y. 10017
(212) 975-3200

CRM Films
1011 Camino del Mar
Del Mar, Calif. 92014
(714) 453-5000

State of California
Department of Health
Health and Welfare Agency
744 "P" Street
Sacramento, Calif. 95814
(916) 445-6951

California State University
Department of Occupational Therapy
Attn. Gwen Wright
125 Seventh Street
San Jose, Calif. 95192
(408) 277-2981

University of California, Berkeley
Extension Media Center
Berkeley, Calif. 94720

University of California, Davis
Instructional Media
Walker Annex West
Davis, Calif. 95616
(916) 752-3556

University of California, La Jolla
Office of Learning Resources
School of Medicine
P.O. Box 109
La Jolla, Calif. 92037
(714) 452-3713

University of California, Los Angeles
Instructional Media Center
405 Hilgard Avenue
Los Angeles, Calif. 90024
(213) 825-4321

University of California, Los Angeles
Neuro-Psychiatric Institute
760 Westwood Plaza
Los Angeles, Calif. 90024
(213) 825-0511

University of California, San Francisco
Communication Office for Research and Training (CORT)
Educational Television Division
San Francisco, Calif. 94143
(415) 666-9000

University of California, San Francisco
Educational TV Division
431 N Building
San Francisco, Calif. 94143
(415) 666-1958

University of California, San Francisco
School of Dentistry
San Francisco Medical Center
San Francisco, Calif. 94143
(415) 666-1323

Cal-Med Photo
P.O. Box 3147
San Diego, Calif. 92103
(714) 566-5030

Campus Film Distributor Corporation
2 Overhill Road
Scarsdale, N.Y. 10583
(914) 472-9590

Capitol Films Laboratory
470 "E" Street, S.W.
Washington, D.C. 20024
(202) 347-1717

Career Aids, Inc.
5024 Lankersheim Boulevard
North Hollywood, Calif. 91601
(213) 985-5656

Carousel Films, Inc.
1501 Broadway
New York, N.Y. 10036
(212) 524-4126

Cas-Ed Tape Division/Edutape, Inc.
P.O. Box 434
Skokie, Ill. 60076

Case Western Reserve University
Audiovisual Television Facility
2109 Adelbert Road
Cleveland, Ohio 44106
(216) 368-2000

Case Western Reserve University
Health Sciences Communications Center
University Circle
Cleveland, Ohio 44106
(216) 368-3776

Charles Cahill Associates, Inc.
5746 Sunset Boulevard
Hollywood, Calif. 90828
(213) 467-1171

Churchill Films
622 North Robertson Boulevard
Los Angeles, Calif. 90069
(213) 657-5110

Ciba Pharmaceutical Company
P.O. Box 1340
Newark, N.J. 07101
(201) 277-5000

Clendening Medical Library
Audiovisual Section
Rainbow Boulevard
Kansas City, Kan. 66103
(913) 236-5252 Ext. 640

Cleveland Clinic
2020 East 93rd Street
Cleveland, Ohio 44106
(216) 229-2200 Ext. 2313

Cleveland Clinic Educational Foundation
Audiovisual Department
9500 Euclid Avenue
Cleveland, Ohio 44160
(216) 444-5699

Cleveland Health Museum and Education Center
8911 Euclid Avenue
Cleveland, Ohio 44106
(216) 231-5010

University of Colorado
Biomedical Communications Media Library
4200 East 9th Avenue
Denver, Colo. 80220
(303) 394-7342

University of Colorado Extension Division
Bureau of Audiovisual Instruction
Stadium 348
Boulder, Colo. 80302
(303) 499-3151 Ext. 7341

University of Colorado Extension Division
Educational Media Center
Stadium 348
Boulder, Colo. 80309
(303) 492-7341

Communications in Learning, Inc.
(Telephone Lecture Network)
2929 Main Street
Buffalo, N.Y. 14214
(716) 837-7556

Comtrenetics, Inc.
340 North Camdin Drive
Beverly Hills, Calif. 90210
(213) 273-5400

Concept Media
1500 Adams Avenue
Costa Mesa, Calif. 92626
(714) 549-3347

Conrad Berens International Eye Film Library
246 Danforth Avenue
Jersey City, New Jersey 07305
(201) 332-6685

Consolidated Film Industries
959 Seward Street
Hollywood, Calif. 90028
(213) 462-3161

Conversation in Radiology
170 Ninth Street
San Francisco, Calif. 94103

Cook, Inc.
925 South Curry Pike
Bloomington, Ind. 47424
(812) 339-2235

Cook-Waite Laboratories
Division of Professional Services
90 Park Avenue
New York, N.Y. 10016
(212) 972-4141

Council for Educational Technology for the United Kingdom
160 Great Porkland Street
London, England
W1N 5TB

Crawley Films Limited
19 Fairmont Avenue
Ottawa 3, Ontario
Canada

Creighton University
Health Sciences Library
2500 California Street
Omaha, Neb. 68178
(402) 536-2908

Cutter Laboratories
Fourth and Parker Streets
Berkeley, Calif. 94710
(415) 841-0123

Cystic Fibrosis Foundation
3379 Peachtree Road, N.W.
Atlanta, Ga. 30326
(404) 262-1100

Dalhousie University
Audiovisual Division
Faculty of Medicine
Halifax, Nova Scotia
Canada

Davis and Geck Film Library
American Cyanamid Company
Danbury, Conn. 06810
(203) 743-4451 Ext. 330

Davis, (F.A.) Company
1915 Arch Street
Philadelphia, Pa. 19103
(215) 568-2270

Dentsply International, Inc.
500 West College Avenue
York, Pa. 17404
(717) 257-5271 Ext. 341

DERM Arts Laboratories
10236 Bunker Ridge Road
Kansas City, Mo. 64137
(816) 761-2500

Dukane Corporation
Audiovisual Division
St. Charles, Ill. 60174
(312) 584-2300

Duke University
Medical Center
Division of Audiovisual Education
Box 3163
Durham, N.C. 27710
(919) 684-3748

Ear Research Institute
2130 West Third Street
Los Angeles, Calif. 90057
(213) 483-4431

Eastern Pennsylvania Psychiatric Institute
Continuing Education
Henry Avenue and Abbottsford Road
Philadelphia, Pa. 19129
(215) 858-6000

Eaton Medical Film Library
Eaton Laboratories
17 Eaton Avenue
Norwich, N.Y. 13815
(607) 335-2253

Eccentric Circle Cinema Workshop
P.O. Box 4085
Greenwich, Conn. 06830
(203) 661-2278

Edcoa Productions, Inc.
520 South Dean Street
Englewood, N.J. 07631
(201) 567-0820

Educational Products, Inc.
5005 West 110th Street
Oak Lawn, Ill. 60453
(312) 425-0800

EDUTAPE, Inc.
P. O. Box 434
Morton Grove, Ill.
(312) 965-8408

Edward Feil Productions
1514 Prospect Avenue
Cleveland, Ohio 44115
(216) 771-0655

Edwards Laboratories
17221 Red Hill Boulevard
Santa Ana, Calif. 92705
(714) 557-8910

Eli Lilly and Company
Educational Resources Program
Dept. MC-340
P. O. Box 1008
Indianapolis, Ind. 46206

Emory University
Calhoun (A.W.) Medical Library
Woodruff Memorial Building
Atlanta, Ga. 30322
(404) 377-2411 Ext. 7770

Encyclopedia Britannica Education Corporation
1822 Pickwick Avenue
Glenview Ill. 60025
(312) 729-6710

ETHICON, Inc.
Somerville, N.J. 08876
(201) 524-0400

Faust Films, Inc.
92 Fayerweather Street
Cambridge, Mass. 02138
(617) 661-7433

Fenwal Laboratories
1 Baxter Parkway
Deerfield, Ill. 60015
(312) 948-2844

Ferranti Electric, Inc.
East Bethpage Road
Plainview, N.Y. 11803
(516) 293-8383

Film Distributors International
1459 Thousand Oaks Boulevard
Thousand Oaks, Calif. 91360
(805) 495-8022

Film Play-Data, Inc.
Medical Film Library
470 Park Avenue, South
New York, N.Y. 10016
(212) 684-5910

Films Incorporated
5625 Hollywood Boulevard
Hollywood, Calif. 90028
(213) 466-5481

Flint Laboratories
1 Baxter Parkway
Deerfield, Ill. 60015
(312) 948-2225

University of Florida
Learning Resource Center
J. Hillis Miller Health Center
Gainesville, Fla. 32610
(904) 392-4143

University of Florida
Office of Medical Education
Box J-213, J. Hillis Miller Health Center
Gainesville, Fla. 32610
(904) 392-2874 or
(904) 392-2870

Geigy Pharamaceuticals
Summit, N.J. 07901
(201) 277-5000

Georgia Regional Medical Program
See Emory University

Georgia Society for Prevention of Blindness
2025 Peachtree Street, N.E.
Atlanta, Ga. 30309
(404) 355-0182

Graphic Films Corporation
3341 Cohuenga Boulevard, West
Hollywood, Calif. 90028
(213) 851-4100

Great Plains National Instructional Television Library
Box 80669
Lincoln, Neb. 68501
(402) 467-2502

Grove Press
Film Division
196 West Houston Street
New York, N.Y. 10014
(212) 242-4900

Grune and Stratton, Inc.
111 Fifth Avenue
New York, N.Y. 10003
(212) 741-6800

Harper and Row Publishers
Audiovisual Department
2350 Virginia Avenue
Hagerstown, Md. 21740
(301) 733-2700 Ext. 59 or 64

Harris-Tuchman Productions, Inc.
751 N. Highland Avenue
Hollywood, Calif. 90038
(213) 936-7189

Harvard Medical School
Mental Health Training Film Program
58 Fenwood Road
Boston, Mass. 02115
(617) 566-6793

Harvard School of Dental Medicine
Audiovisual Department
188 Longwood Avenue
Boston, Mass. 02115
(617) 734-3300 Ext. 2272 or 2461

Health and Welfare Materials Center
801 Second Avenue
New York, N.Y. 10017
(212) 889-6770

Health Education Service
P.O. Box 7283
Albany, N.Y. 12224
(518) 474-2121

Health Science Communications Center
2119 Abington Road
Cleveland, Ohio 44106
(216) 368-3116

Hospital Research and Educational Trust
840 N. Lake Shore Drive
Chicago, Ill. 60611
(312) 645-9400

Human Development Institute
(A Division of Instructional Dynamics)
166 E. Superior Street
Chicago, Ill. 60611
(312) 943-1200

ICI America, Inc.
Concord Pike and Murphy Road
Wilmington, Del. 19899
(302) 575-3275

University of Illinois at the Medical Center
College of Pharmacy
Office for Educational Development
833 South Wood Street
Chicago, Ill. 60612
(312) 996-7190

University of Illinois at the Medical Center
Library of the Health Sciences
Multimedia Services Department
1750 West Polk
Chicago, Ill. 60612
(312) 996-8978

University of Illinois at the Medical Center
Office of Educational Resources
Room 35, 833 South Wood Street
Chicago, Ill. 60612
(312) 996-7912

University of Illinois Visual Aids Service
1325 South Oak Street
Champaign, Ill. 61820
(217) 333-1360 or (217) 333-1361

Indiana University
Audio-Visual Center
Bloomington, Ind. 47401
(812) 337-8087

Indiana University
Department of Obstetrics and Gynecology
1100 West Michigan Street
Indianapolis, Ind. 46202
(317) 264-8609/8600

Institute for Dermatologic Communication and Education
2785 Jackson Street
San Francisco, Calif. 94115
(415) 929-8011

Institute of Continuing Education
P. O. Box 276
Sawyer, Mich. 49125
(616) 426-3433

Inter-Church A-V, Inc.
832 Silas Deane Highway
Wethersfield, Conn. 06109
(203) 529-8235

International Film Bureau
332 South Michigan Avenue
Chicago, Ill. 60604
(312) 427-4545

Iowa State University of Science and Technology
Media Resources Center
121 Pearson Hall
Ames, Iowa 50011
(515) 294-1540

University of Iowa Media Library
C5 East Hall
Iowa City, Iowa 52242
(319) 353-5885

Jam Handy Organization
2821 East Grand Boulevard
Detroit, Mich. 48211
(313) 875-2450

John Wiley and Sons
605 Third Avenue
New York, N.Y. 10016
(212) 867-9800

Johns Hopkins Medical Institutions
Division of Audio/Visual Services
1721 E. Madison St., Turner Auditorium
Baltimore, Md. 21205
(301) 955-3561

Johns Hopkins University
Welch Medical Library
1900 East Monument Street
Baltimore, Md. 21205

Joint Implant Surgery and Research Foundation
1160 North Vermont Avenue
Los Angeles, Calif. 90029
(213) 666-6574

Jones, (W. A.) Cell Science Center
Tissue Culture Association
Film Library
Old Barn Road
Lake Placid, N.Y. 12946
(518) 523-2427

Kansas Center for Mental Retardation and Human Development
Bureau of Child Research
223 Haworth Hall
University of Kansas
Lawrence, Kan. 66044

University of Kansas
Bureau of Visual Instruction
Attn: Film Librarian
Lawrence, Kan. 66044
(913) 864-4295

University of Kansas
Division of Continuing Education, Film Services
746 Massachusetts Street
Lawrence, Kan. 66044
(913) 864-3352

University of Kansas Medical Center
Department of Anatomy
Attn: Dr. Howard Matzke
Kansas City, Kan. 66103
(913) 831-7000

University of Kansas Medical Center
Division of Continuing Education
Kansas City, Kan. 66103
(913) 831-7130

Lawren Productions
P.O. Box 1542
Burlingame, Calif. 94010
(415) 697-2558

Lederle Laboratories
Film Library
(A Division of American Cyanamid Co.)
1 Casper
Danbury, Conn. 06810
(203) 743-4451

Lippincott (J.B.) Company
E. Washington Square
Philadelphia, Pa. 19105
(215) 574-4200

Loma Linda University
Film Library
Loma Linda, Calif. 92354
(714) 824-0800 Ext. 2035

University of Louisville
Instructional Communication Center
Louisville, Ky. 40208
(502) 636-4911

McGraw-Hill
Contemporary McGraw Hill Film Sales
1221 Avenue of the Americas
New York, N.Y. 10020
(212) 997-1221

McMaster University
Medical Centre
1200 Main Street, West, Room 138
Hamilton 16, Ontario
Canada

MacMillan, Films, Inc.
34 MacQuesten Parkway, South
Mt. Vernon, N.Y. 10550
(914) 664-5051

McNeil Laboratories
Camphill Road
Fort Washington, Pa. 19034
(215) 836-4500

University of Maryland School of Dentistry
Independent Learning Center
666 West Baltimore Street
Baltimore, Md. 21201
301-528-7944

University of Maryland School of Medicine
Office of Medical Education
Baltimore Md. 21201
(301) 528-6613

Mayo Clinic
Audiovisual Center
200 First Street
Rochester, Minn. 55901
(407) 282-2511 Ext. 2328

Medcom, Inc.
2 Hammarskjold Plaza
New York, N.Y. 10017
(212) 765-6162

Medi Visuals
4 Midland Avenue
Hicksville, N.Y. 11801
(516) 433-5672

Medical Film Guild
506 West 57th Street
New York, N.Y. 10019
(212) 247-0510

Medical Films, Inc.
111 Sherman Avenue
New Haven, Conn. 06511
(203) 624-5850

Medical Media Network
10995 Le Conte Avenue
Room 514
Los Angeles, Calif. 90024

Medical Recording Service Foundation
Kitts Croft, Writtle
Chelmsford, CM1 3EH
England

Medifacts, Ltd.
33 Somerset Street, West
Ottawa, Ontario
Canada

Mental Health Training Film Program
33 Fenwood Road
Boston, Mass. 02115
(617) 223-2100 or (617) 566-6793

Merck Sharp and Dohme
West Point, Pa. 19486
(215) 699-5311

Merrell National Laboratories
Merrell Film Library
1269 Gest Street
Cincinnati, Ohio 45203
(513) 381-0325

University of Michigan
Audiovisual Education Center
416 South Fourth Street
Ann Arbor, Mich. 48109
(313) 764-5361

University of Michigan Medical Center
Media Library
Towsley Center for Continuing Medical Education
Ann Arbor, Mich. 48109
(313) 763-2074

University of Michigan School of Dentistry
Department of Telecommunications
3066 School of Dentistry
Ann Arbor, Mich. 48109
(313) 763-0205

University of Michigan School of Medicine
Medical Television Center
Ann Arbor, Mich. 48109
(313) 764-2275

Micro X-Ray Recorder, Inc.
Medical Film Slide Division
3755 W. Lawrence Avenue
Chicago, Ill. 60625
(312) 478-8560

Milner-Fenwick, Inc.
3800 Liberty Heights Avenue
Baltimore, Md 21215
(301) 664-2600

Minnesota Mining and Manufacturing Company (3M)
3M Center, Building 236-IN
St. Paul, Minn. 55101
(612) 733-5454

University of Minnesota
Audiovisual Library Service
3300 University Avenue, S.E.
Minneapolis, Minn. 55414
(612) 373-3810

University of Minnesota
Center for Death Education and Research
1167 Social Science Building
Minneapolis, Minn. 55455

University of Minnesota
Dental Audiovisual Library
Health Sciences Unit A
Room 16-209
Minneapolis, Minn. 55455
(612) 373-3258

University of Mississippi Medical Center
Department of Psychiatry
2500 North State Street
Jackson, Miss. 39216
(601) 362-4411

University of Missouri, Columbia
Educational Resources Group
Medical Center, M741
Columbia, Mo. 65201
(314) 882-4141

University of Missouri, Kansas City
School of Dentistry
Attn: Bill Morse
650 East 25th Street
Kansas City, Mo. 64108
(816) 221-3500 Ext. 283

University of Missouri, Kansas City
School of Medicine
Office of Educational Resources
2411 Holmes Street
Kansas City, Mo. 64108
(806) 474-4100 Ext. 255

Multi Media Resource Center, Inc.
1525 Franklin Street
San Francisco, Calif. 94109
(415) 673-5100

Myasthenia Gravis Foundation
2 East 103rd Street
New York, N.Y. 10029
(212) 427-7344

NBC Educational Enterprises
30 Rockefeller Plaza
New York, N.Y. 10020
(212) 664-4444

National Association for Mental Health Film Service
(NAMH Film Service)
P.O. Box 7316
Alexandria, Va. 22307
(703) 768-3912

National Board of Medical Examiners
3930 Chestnut Street
Philadelphia, Pa. 19104
(215) 349-6400 Ext. 256

National College of Chiropractic
Learning Resource Center
200 East Roosevelt Road
Lombard, Ill. 60148
(312) 629-2000 Ext. 50

National Medical and Biological Film Library
Canadian Film Institute
142 Sparks Street
Ottawa 4 Ontario
Canada

Nebraska Psychiatric Institute
Biomedical Communications Division
602 South 44th Avenue
Omaha, Neb. 68105
(402) 541-4552

University of Nebraska
Instructional Media Center, University Extension Division
421 Nebraska Hall
Lincoln, Neb. 68588
(402) 472-7211 Ext. 2171

University of Nebraska
Meyer Children's Rehabilitation Institute
Media Resource Center
444 South 44th Street
Omaha, Neb. 68131
(402) 541-7760

University of Nebraska Medical Center
Biomedical Communications
42nd and Dewey Avenue
Omaha, Neb. 68105
(402) 541-4304

Network for Continuing Medical Education
15 Columbus Circle
New York, N.Y. 10023
(212) 541-8088

University of Nevada
School of Medical Sciences
Division of Behavioral Sciences
Anderson Health Sciences Building
Reno, Nev. 89507
(702) 784-4917

College of Medicine and Dentistry of New Jersey
Rutgers Medical School
Health Sciences Library
Attn. Media Resource Library Project
100 Bergen Street
Newark, N.J. 07103
(201) 456-4700

University of New Mexico
Library of the Medical Sciences
Albuquerque, N.M. 87131

New York City
Office for the Aging
250 Broadway
New York, N.Y. 10007
(212) 566-2752

New York Films
43 West 61st Street
New York, N.Y. 10023
(212) 568-4000

New York State Psychiatric Institute
722 West 163rd Street
New York, N.Y. 10032
(212) 568-4000

State University of New York at Buffalo
Division of Restorative Dentistry
240 Farber Hall
Buffalo, N.Y. 14214
(716) 831-5492

State University of New York at Buffalo
Media Library
22 Foster Annex
Buffalo, N.Y. 14214
(716) 831-2304

State University of New York Upstate Medical Center
Educational Communications Department
766 Irving Avenue
Syracuse, N.Y. 13210
(315) 473-4860

New York University
College of Dentistry
421 First Avenue
New York, N.Y. 10010
(212) 598-3776

New York University Film Library
26 Washington Place
New York, N.Y. 10003
(212) 598-2251

Ney (J.M.) Company
Maplewood Avenue
Bloomfield, Conn. 06002
(203) 242-2281

University of North Carolina at Chapel Hill
Medical Television Center
School of Medicine
Chapel Hill, N.C. 27514
(919) 966-1134

Northwestern University
Dental School Library
311 East Chicago Avenue
Chicago, Ill. 60611
(312) 649-8332

Nuclear Associates
100 Voice Road
Carle Place, N.Y. 11514
(516) 741-7615

Nursing Media Index
323 St. Clair Avenue East
Toronto, Ontario
M4T 1P3
Canada

Ochsner Clinic
1514 Jefferson Highway
New Orleans, La. 70121
(504) 834-7070

Ohio State University
Division of Child Psychiatry
410 West 10th Avenue
Columbus, Ohio 43210
(614) 422-4426

Ohio State University
Department of Photography and Cinema
156 West 19th Avenue
Columbus, Ohio 53210
(614) 42205966

Ohio State University
Medical Audiovisual and Television Center
School of Allied Medical Professions Building
1583 Perry Street
Columbus, Ohio 43210

Ohio State University College of Medicine
Center for Continuing Medical Education
320 West Tenth Avenue
Columbus, Ohio 43210
(614) 422-5674

Oklahoma State University
Audiovisual Center
Stillwater, Okla. 74074
(405) 372-6211 Ext. 7874

University of Oklahoma Health Sciences Center
Learning Resource Center
Oklahoma City, Okla. 73190
(405) 217-4733

University of Oklahoma Medical Center
Behavioral Sciences Media Laboratory
Department of Psychiatry and Behavioral Sciences
Oklahoma City, Okla. 73104
(405) 271-5251

Olympic Media Information
161 West 22nd Street
New York, N.Y. 10011
(212)675-4500

Ortho Pharmaceutical Corporation
Department of Educational Services
Raritan, N.J. 08869
(201) 524-0400

Orthopedic Audio-Synopsis Foundation
1510 Oxley Street
P.O. Box "H"
South Pasadena, Calif. 91030
(213) 682-1760

Pacific University
College of Optometry
Learning Resource Center
Forest Grove, Or. 97116
(503) 357-6151

University of the Pacific
Department of Operative Dentistry
School of Dentistry
2155 Webster Street
San Francisco, Calif. 94115
(415) 922-0220

Parke, Davis and Company
Attn: Medical Motion Pictures
P.O. Box 118GPO
Detroit, Mich. 48232
(313) 567-5300

Parkinson's Disease Foundation
William Black Research Building
640 W. 168th Street
New York, N.Y. 10032
(212) 923-4700

Parsons State Hospital and Training Center
Media Support Services
2601 Gabriel
Parsons, Kan. 67537
(316) 421-6550 Ext. 234

Parsons State Hospital and Training Center
Media Support Services
2601 Gabriel
Parsons, Kan. 67537
(316) 421-6550 Ext. 234

Pennsylvania State University
Audio-Visual Services
17 Willard Building
University Park, Pa. 16802
(814) 865-6315

Perennial Education, Inc.
1825 Willow Road
Northfield, Ill. 60093
(312) 446-4153

Pfizer Medical Film Library
470 Park Avenue
New York, N.Y. 10016
(212) 684-5910

Pharmaceutical Manufacturers Association
1155 Fifteenth Street N.W.
Washington, D.C. 20005
(202) 296-2440

University of Pittsburgh
Department of Periodontics
C-118
Pittsburgh, Pa. 15213
(412) 624-3213

University of Pittsburgh
Division of Medical Illustration
Room 1016 Scaife Hall
Pittsburgh, Pa. 15213
(412) 624-2636

University of Pittsburgh
Medical Arts Division
Magee-Womens Hospital
Forbes and Halket Streets
Pittsburgh, Pa. 15213
(412) 681-5700

University of Pittsburgh School of Medicine
Division of Continuing Education
1022 Scaife Hall
Pittsburgh, Pa. 15261
(412) 624-2653

Planned Parenthood
World Population Film Library
470 Park Avenue, South
New York, N.Y. 10001
(212) 684-5910

Planned Parenthood Federation of America
Publications Department
810 7th Avenue
New York, N.Y. 10019
(212) 541-7800

Professional Information Library
130 Parkhouse
Dallas, Tex. 75207
(214) 748-7776

Professional Research
North Decatur Office Center
3796 North Decatur Road
Suite B-3
Decatur, Ga. 30033
(404) 294-9555

Public Television Library
475 L'Enfant Plaza West, S. W.
Washington, D.C. 20024
(202) 488-5000

Q Corporation
49 Sheridan Avenue
Albany, N.Y. 12210
(518) 436-9968

Quest Publishing Company
P.O. Box 4141
Diamond Bar, Calif. 91765
(714) 595-8012

Radiological Society of North America
713 East Genesee Street
Syracuse, N.Y. 13210
(315) 476-5318

Ramsgate Films
704 Santa Monica Boulevard
Santa Monica, Calif. 90401
(213) 394-8819

Rehabilitation International, USA
20 West 40th Street
New York, N.Y. 10018
(212) 869-9907

Research Media, Inc.
4 Midland Avenue
Hicksville, N.Y. 11801
(516) 433-5672

Robert A. Becker Company
Audiovisual Division
299 Park Avenue
New York, N.Y. 10017
(212) 421-8900

Robert J. Brady Company
Route 197
Bowie, Md. 20715
(301) 262-6300

Robins (A.H.) Company
Public Affairs Department
1407 Cummings Drive
Richmond, Va. 23220
(804) 257-2000

Roche Film Library
c/o Association-Sterling Films
See Association-Sterling Films
for regional addresses

Roerig Division Film Library
Division of Pfizer Pharmaceuticals
267 West 35th Street
New York, N.Y. 10001
(212) 573-2323

Ross Laboratories Audiovisual Library
Division of Abbott Laboratories
625 Cleveland Avenue
Columbus, Ohio 43216
(614) 228-5281

Royal Institution of Great Britain
21 Albermarle Street
London, England

Rutgers Medical School
P.O. Box 101
Piscataway, N.J. 08854
(201) 564-1966

SMP Memorial Film Library
c/o Cooper Laboratories (PR Inc.)
300 Fairfield Road
Wayne, N.J. 07470
(201) 694-6263

Saginaw County Hospital
3340 Hospital Road
Saginaw, Mich. 48605
(517) 792-1511

St. Joseph's Hospital, Milwaukee
500 West Chambers Street
Milwaukee, Wis. 53210
(412)447-2280

Sandoz Medical Film Library
Route 10
East Hanover, N.J. 07936
(201) 386-1000

Saturn Scientific, Inc.
540 N.E. 8th Street
Fort Lauderdale, Fla. 33303
(305) 764-0221

Saunders (W.B.) Company
West Washington Square
Philadelphia, Pa. 19105
(215) 575-4700

Schering Professional Film Library
Galloping Hill Road
Kenilworth, N.J. 07033
(201) 931-2000

Searle Laboratories
Box 5110
Chicago, Ill. 60680
(312) 982-7000

Sigma Information, Inc.
Behavioral Sciences Tape Library
545 Cedar Lane
Teaneck, N.J. 07666
(201) 836-7051

Sister Kenny Institute
A/V Publications Office
1800 Chicago Avenue
Minneapolis, Minn. 55405
(612) 333-4251

Society for Visual Education
1345 Diversy Parkway
Chicago, Ill. 60614
(312) 525-1500

South Carolina Regional Medical Program
Medical University of South Carolina
80 Barre Street
Charleston, S.C. 29401
(803) 792-4241

University of Southern California
Division of Cinema
Film Distribution Section
University Park
Los Angeles, Calif. 90007
(213) 746-2238

University of Southern California
Eileen and Kenneth T. Norris Medical Library
2025 Zonal Avenue
Los Angeles, Calif. 90033
(213) 226-2409

University of Southern California School of Medicine
Office of Instructional Media Services
Room 200D Keith Building
2025 Zonal Avenue
Los Angeles, Calif.
(213) 226-2041

Spectrum Publications, Inc.
P.O. Box 32
75-31 192nd Street
Flushing, N.Y. 11366
(212) 658-0888

Squibb Film Library
P.O. Box 315
Franklin Lakes, N.J. 07417
(201) 891-8240

Stanford University
Department of Surgery
A260
Stanford, Calif. 94305
(415) 321-1200

Stanford University School of Medicine
Division of Instructional Media
Attention Mrs. Burlingame
Stanford, Calif. 94305
(415) 497-5853

Stern Dental Company
320 Washington Street
Mount Vernon, N.Y. 10553
(914) 668-4300

Sutherland Learning Association
8425 West 3rd Street
Los Angles, Calif. 90048
(213) 655-2822

Syracuse University
Film Rental Center
1455 East Colvin Street
Syracuse, N.Y. 13210
(315) 479-6631

Tampa Tracings
Oldsmar, Fla. 33557
(813) 937-7370

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625 North Michigan Avenue
Chicago, Ill. 60611
(312) 787-0303

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P.O. Box 66824
Houston, Tex. 77006
(713) 523-6701

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Buffalo, N.Y. 14225
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Telstar Productions
366 North Prior Avenue
St. Paul, Minn. 55104
(612) 644-4726

Temple University Health Sciences Center
3223 North Broad Street
Philadelphia, Pa. 19140
(215) 229-8500 Ext. 371

University of Tennessee School of Dentistry
847 Monroe
Memphis, Tenn.
(901) 528-5692 or (901) 534-3011

Texas Heart Institute
P.O. Box 20345
Houston, Tex. 77025
(713) 521-4024

University of Texas
M.D. Anderson Hospital and Tumor Institute
Department of Medical Communications
Texas Medical Center
Houston, Tex. 77030
(713) 792-2801

University of Texas Health Science Center at San Antonio
Department of Anatomy
7703 Floyd Curl Drive
San Antonio Tex. 78284
(512) 696-6533

University of Texas Medical Branch at Galveston
Medical Illustrations Department
Galveston, Tex. 77550
(713) 765-2481

Thiokol, Humetrics Corporation
6374 Arizona Circle
Los Angles, Calif. 90045

Train-Aide Educational Systems
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229 North Central Avenue
Glendale, Calif. 91203
(213) 247-5942

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11016 Garden Grove Boulevard
P.O. Box 116
Garden Grove, Calif. 92642
(714) 898-2561 or (800) 854-2485

Transit Media
P.O. Box 315
Franklin Lakes, N.J. 07417
(201) 891-8240

Travenol Laboratories
Medical Film Library
6301 Lincoln Avenue
Morton Grove, Ill. 60053
(312) 965-4700

Tripler Army Medical Center
Department of Pathology
APO
San Francisco, Calif. 96438
(415) 561-2211

Tufts University
Biomedical Communications Department
136 Harrison Avenue
Boston, Mass. 02111
(617) 956-5000

Tutorials of Cytology
5841 Maryland Avenue
Chicago, Ill. 60637
(312) 947-0098

U.S. Academy of Health Sciences
Health Sciences Media Division
Fort Sam Houston, Tex. 78234
(512) 221-2651

U.S. Armed Forces Institute of Pathology
Washington, D.C. 20306
(202) 576-2800

U.S. Army Training and Doctrine Command
Training Material Support Division
Tobyhanna, Pa. 18466
(717) 894-8301 Ext. 7438

U.S. Atomic Energy Commission
Technical Information Center
P.O. Box 62
Oak Ridge, Tenn. 37830
(615) 483-8611 Ext. 5161

U.S. Center for Disease Control
Instructional Systems Division
Bureau of Training
Atlanta, Ga. 30333
(404) 633-3311 Ext. 6506

U.S. High Blood Pressure Information Center
120/80 National Institutes of Health
Bethesda, Md. 20014
(301) 656-4000

U.S. National Audiovisual Center
National Archives and Records Service
Sales Branch
General Services Administration
Washington, D.C. 20409
(301) 763-5500

U.S. National Clearinghouse for Mental Health
Alcohol, Drug Abuse, and Mental Health Administration
Office of Program Planning and Evaluation
National Institute of Mental Health
5600 Fishers Lane
Rockville, Md. 20852
(301) 656-4000

U.S. National Institute for Occupational Health and Safety
1014 Broadway
Cincinnati, Ohio 45202
(513) 684-2595

U.S. National Institute of Child Health and Human Development
National Institute of Health
Bethesda, Md. 20014
(301) 656-4000

U.S. National Medical Audiovisual Center
Station K
Atlanta, Ga. 30324
(404) 526-3551

U.S. National Naval Medical Center
Medical Film Library
Bethesda, Md. 20014
(202) 295-1226

U.S. Office of Water Program Operations
National Training Center
Cincinnati, Ohio 45268
(513) 684-7501

U.S. Public Health Service
Educational Development Branch
Division of Mental Health
Bureau of Health Resources Development
Health Resources Administration
Washington, D.C. (301) 656-4000

U.S. Veterans Administration
Dental Training Center
Veterans Administration Hospital
50 Irving Street, N.W.
Washington, D.C. 20422
(202) 483-6666

U.S. Veterans Administration
Central Office Film Library
810 Vermont Avenue
Washington, D.C. 20420
(202) 393-4120 Ext. 2780

Universal Learning Systems
7401 Sunset Boulevard
Hollywood, Calif. 90046
(213) 876-1190

University Park Press
Audiovisual Division
Chamber of Commerce Building
Baltimore, Md. 20202
(301) 547-0700

Upjohn Company
7000 Portage Road
Kalamazoo, Mich. 49001
(616) 382-4000 Ext. 3572

Vacumate Corporation
114 West 20th Street
New York, N.Y. 10001
(212) 255-4674

Medical College of Virginia
Learning Resource Center
MCV Box 62
Richmond, Va. 23298
(801) 770-7151

Visual Education Department
Virginia Commonwealth University
Richmond, Va. 23298
(804) 770-7151

WRAMC-TV (Television station) Washington, D.C.
Room 1077, AFIP Building
Washington, D.C. 20305
(202) 576-2878

Warner/Chilcott
Film Department
201 Tabon Road
Morris Plains, N.J. 07950
(201) 540-2000

University of Washington
Audiovisual Services
B54 Administration Building
Seattle, Wash. 95195
(206)543-2500

University of Washington
Health Sciences Learning Resources Center
T-252 Health Sciences Building
Seattle, Wash. 98195
(206) 543-0050

University of Washington Press
Seattle, Wash. 98195
(206) 543-4050

Wayne State University
Detroit Education for Nursing Via Television (DENT)
College of Nursing
Detroit, Mich. 48202
(313) 577-4082

Wayne State University
Systems, Distribution and Utilization
5448 Cass Avenue
Detroit, Mich. 48202
(313) 577-1980

Wediko Films
470 Park Avenue, South
New York, N.Y. 10016
(212) 684-5910

University of Western Ontario
Medical School
London, Ontario, Canada N6A 5B8

Wexler Film Productions
810 North Seward Street
Los Angeles, Calif. 90038
(213) 462-6671

Whaledent, Inc.
236 Fifth Avenue
New York, N.Y. 10016
(212) 532-9750

Winthrop Laboratories
Motion Picture Department
90 Park Avenue
New York, N.Y. 10010
(212) 972-4141

University of Wisconsin-Milwaukee
TV Coordinator for Nursing
School of Nursing
Frances Cunningham Building
Milwaukee, Wis. 53201
(414) 963-5458

Wyeth Laboratories
P.O. Box 8299
Philadelphia, Pa. 19101
(215) MU8-4400

Yale University School of Medicine
Communications Media Group
333 Cedar Street
New Haven, Conn. 06510
(203) 436-3489

Yearbook Medical Publishers
35 East Wacker Drive
Chicago, Ill. 60601
(312) 726-9733

Zimmer Manufacturing Company
Detroit and Arthur
Warsaw, Ind. 46580
(219) 267-6131 Ext. 169

GLOSSARY

ACCESSION NUMBER. A number or code assigned to an item for filing or shelving.

AUDIO. The sound portion of a film or recording.

AUDIOTAPE. The recording of sound on magnetic tape.

AUDIOVISUAL. A general term for nonbook items which can be seen and/or heard: sound films, recordings, filmstrips, etc.

BIBLIOGRAPHY. A list of writings, publications, audiovisual programs, etc. on a particular subject or area of information.

BOOKING. The act of scheduling a particular media item for use at a specific time and place.

CAPTION. A title at the bottom of a filmstrip frame or super-imposed at the bottom of movies for the deaf.

CARTRIDGE. A permanently encased reel of film or tape which has the ends joined together to form a loop; used for filmstrips, motion pictures, sound recordings, and videorecordings.

CASSETTE. A permanently encased film or tape that runs reel to reel; used for motion pictures, sound recordings, and videorecordings.

CATALOG. A list of audiovisual holdings filed by subject, title, and any other important information. Catalogs may be in various formats such as 3" x 5" cards, books, computer printouts, microfiche, etc.

COPYRIGHT. The exclusive right, granted by the United States Copyright Office, to offer copies of an audiovisual for public use. Material not copyrighted is said to be in the "public domain".

CREDITS. Titles placed at the beginning or end of a film, giving names of the cast, technicians, and distributor.

DOUBLE TRACK TAPE. A tape recording in which one track is recorded to the end of the reel, after which it is turned over and the second track is played as it returns to the first reel. In stereo recordings, both tracks are played together, but recorded from different microphones to give a stereophonic effect.

DUPE. A copy of a tape recording or a motion picture. Short for "duplicate".

EARPHONES. Devices used for individual listening of recordings (and sometimes films and filmstrips).

8-TRACK TAPE. A tape cartridge form featuring eight separate tracks.

EXCITER LAMP. An unfrosted light bulb which scans the sound track of a film and translates it into electrical energy which comes through the loudspeakers as music, sound effects and/or dialogue. Also called a photoelectric cell.

FILMSTRIP. A length of film (usually 35 mm.) on which still images are recorded, presenting an integrated communication; intended for projection frame by frame.

FOCUS. A situation which occurs when a subject is the proper distance from the lens to produce a sharp picture. Also, the act of sharpening a picture on the screen by manipulating the lens barrel.

FRAME. A single picture, one of a series on a strip of motion picture film or filmstrip, placed between the sprocket holes on each side.

HARDWARE: The equipment (16 mm. projectors, filmstrip projectors, slide projectors, videotape cassette players, audiotape cassette players, etc.) used to project audiovisual materials (software) such as 16 mm. films, filmstrips, slides, videotape cassettes, audiotape cassettes, etc.

KINESCOPE RECORDINGS. A film made from a television program taken directly from the picture tube.

KIT. A package of more than one medium designed for use as a unit; if one of the media is so clearly the principal one that all others must be considered as auxiliary or accompanying, the package is not considered as a kit.

LEADER. (1) A protective length of film, either white or colored, which is used to thread the projector so none of the actual picture is lost in threading. Many times this plain leader will have pertinent information on it, such as the title, laboratory information, and name of distributor. (2) A length of film which has "count down" cue numbers used at the beginning of most reels. Two such leaders, developed by the Academy of Motion Picture Arts and Science, are denoted as AMTPE and Academy leaders.

LENS. The tube or barrel consisting of various optical elements which take and project films. All films run through the projector with the image upside down and the lens elements change and correct the picture to its right-side-up status on the screen.

MAGNETIC SOUND. A soundtrack that is reproduced by means of a magnetic strip of iron oxide and electronic pickup heads (as on a tape player) rather than by an optical soundtrack with a sound drum and photoelectric cell. Used for multichannel sound and in some 8 mm. sound projectors.

MEDIUM DESIGNATOR. A generic term indicating the category of material to which and audiovisual work belongs, such as filmstrip, motion picture, slide, videorecording, etc.

MICROPHONE. A sensitive instrument which picks up sounds for recording a record, tape, or film soundtrack.

MOTION PICTURE. A length of film on which an integrated communication in motion is recorded; intended for continuous projection at a standard speed.

POLICIES. The written statements governing the audiovisual department and how it selects its materials.

PREVIEWING. Screening an audiovisual for evaluation before purchasing to determine its value and usefulness for the collection.

PRODUCER. A person or body responsible for producing (physically making) and audiovisual.

PUBLIC DOMAIN. Any material which is not copyrighted or on which the copyright has expired.

REAL TIME. The actual time in which a physical process takes place. (Often used in reference to audiovisual materials. It would take 60 minutes of real time to play a 60 minute audiotape cassette. It might only take 2-3 minutes to fast forward or re-wind the tape at a speed higher than real time.)

REELS. (1) A spool which holds movie film or recording tape. (2) "FEED REEL." The full reel of film or tape which is threaded into the machine for showing or playing. (3) TAKE-UP REEL. The reel which receives the film or tape after it has been shown or played.

RENTAL FEE. The charge for renting a film, filmstrip, videotape cassette, audiotape cassette, slides, or other media from a library or collection.

SCREEN. A sheet of reflective material on which motion pictures are shown. They come in both wall and tripod styles and with a variety of surfaces. As a verb, the word means to view films.

SHELFLIST. A list of all audiovisual holdings (in a given library) which is organized according to the shelf arrangement of the audiovisual materials. This list is used for the internal maintenance of the collection.

SLIDE. A segment of film or other transparent material on which a still image is recorded; mounted for viewing by means of a slide.

SOFTWARE. A term used to generally designate audiovisual materials such as 16 mm. films, filmstrips, videotape cassettes, audiovisual cassettes, etc. which are played or projected on audiovisual equipment (hardware).

SOUND RECORDING. A generic medium designator for all works in aural media.

SOUND TRACK, MAGNETIC. A narrow strip of magnetizable material which is added to a motion picture and will accept sound impulses in the form of magnetic variations.

SOUND TRACK, OPTICAL. A narrow band of light and dark areas or lines along one side of a motion picture which through the action of light is converted into the film's sound.

SYNCHRONIZATION (SYNC). The matching of sound and image on a film or slides and recording. When they are not matched, the audiovisual is said to be "out of sync."

THREADING. The act of putting a film or tape through the playing channel.

THUMBSPOT. A visible mark placed in the lower left corner of a slide which indicates the proper position for correctly viewing the slide.

UNION CATALOG. An orderly compilation of the holdings of two or more libraries.

VIDEORECORDING. A recording of an integrated communication in motion; originally generated in the form of electronic impulses and designed primarily for television playback. The term includes videocassettes, videodiscs, and videotapes.

WEEDING. The clearing out of damaged, outdated, and poorly circulating films, recordings and other media.

ZOOM LENS. A lens with elements which cause a scene to be brought up into close-up by manipulating the lens and not the subject. Can also be used to "zoom out" from a close-up to a long shot.

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